DOCUMENT RESUME

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INSTITUTION	Campbell County Board of Education, Alexandria, Ky..
SPONS AGENCY	Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.; Kentucky State Dept. of Education, Frankfort.
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IDENTIFIERS	Elementary Secondary Education Act Title III; ESEA Title III

ABSTRACT

The Northern Kentucky In-Service Innovation Center Project was established to provide in-service education opportunities for professional staff members through laboratory schools with satellites for use as demonstration sites, staff visitation, use of consultants, video tape services, and clinics. The overall focus of these in-service activities was to analyze, design, and implement programs to facilitate educational change in the region. (Detailed summaries of data are presented.) (Author)

ED 080489

Northern Kentucky In-Service Innovation Center

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SP 006 771

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PART II NARRATIVE REPORT

END OF BUDGET PERIOD REPORT

Elementary and Secondary Education Act of 1965, Title III as amended

PROJECT: Northern Kentucky In-Service Innovation Center

ADDRESS: Campbell County Board of Education
Alexandria, Kentucky 41001

PROJECT NUMBER: 27-68-0001-3

GRANT NUMBER: 091-001-1

STATE: Kentucky

BUDGET PERIOD: July 1, 1970 - August 31, 1971

I. This section identifies the major objectives of the Northern Kentucky In-Service Innovation Center Project and describes the extent to which these were achieved.

The Northern Kentucky In-Service Innovation Center project was established to provide in-service education opportunities for professional staff members by creating Laboratory Schools with their Satellites for use as demonstration sites, staff visitation, use of consultants, video tape services, and clinics. The overall focus of these in-service activities was to analyze, design, and implement programs to facilitate educational change in the region.

In terms of the region's assignment of need priority, the central thrust of this project has been and will continue to be to develop, implement and test innovative in-service education processes designed to increase the professional competence of personnel in the region so that concomitant changes occur in curricula, instructional methods and

auxiliary services to individual pupils. The project's objectives have been concerned with obtaining the optimum level of staff participation in program change processes in real "school laboratories." The levels of participation have been programmed and translated into objectives. These objectives in terms of the third year of operation are as follows:

1. To develop ways of speeding up the processes whereby a school staff not only learns how to, but actually completes the task of: (a) analyzing their pupil needs, curricula and instructional procedures; (b) developing designs and strategies for changing these three areas and (c) testing changes in the schools themselves. To accomplish this major objective more specific objectives are:
   A. To refine and intensify the development of the three laboratory schools being used as learning laboratories;
   B. To devise improved ways of working with staffs within the satellite schools attached to each laboratory school;
   C. To develop other means and intensify efforts to secure innovation implementation among both the satellite and peripheral schools within the region.

II. To expand the use of the laboratory schools as demonstration centers for innovative curricula, instruction and pupil personnel development programs. This thrust would be toward providing examples of

exemplary program development processes for investigation and regional diffusion;

III. To devise methods for involving all schools in a more intensive effort to engage in this type of self-improvement via analysis of current status, design of new programs and the testing-evaluation of the new programs;

IV. To extend the level of cooperation among the twenty-two public and one parochial school districts in the region so that there are developed appropriate ways of sharing services and costs of maintaining school programs.

The Northern Kentucky In-Service Innovation Center was funded on the second continuation project on July 1, 1970. The Coordinator of Laboratory School Experimentation began immediately to continue planning the implementation and testing of programs in the laboratory schools.

The three laboratory schools were Third District Elementary School in Covington, representing the urban area, the James A. Caywood Elementary School in Kenton County, representing the suburban area, and Pendleton High School in Pendleton County, representing the rural area.

The satellite schools were not represented at laboratory school sessions as in previous years but held meetings for implementation of their own programs. The satellite schools representing the urban area were St. John on Pike St., in Covington; Ludlow High School, Ludlow; and Arnold Elementary in Newport;

The Seventh District in Covington did not choose to participate this year. In the suburban area the satellite schools were St. Thomas in Ft. Thomas, Cold Spring Elementary in Campbell County, and Ruth Moyer Elementary in Ft. Thomas. Florence Elementary in Boone County did not choose to participate. Rural satellite schools were Grant County High School, Owen County Elementary, Walton-Verona Elementary and Carroll County High School.

The laboratory school faculties in the urban, suburban and rural areas held 20 study sessions each. Ten of the study sessions in the suburban laboratory school, five of the study sessions in the rural laboratory school, and ten study sessions in the urban laboratory school were held in August before the beginning of the school year to prepare for the new program. The suburban laboratory held two study sessions in June to prepare their program for next year.

The satellite school faculties held the following number of study sessions: Cold Spring Elementary, eight; Ruth Moyer Elementary, six; St. Thomas, eight; Arnold, eight; St. John, four; Grant County High School, eight; Carroll County High School, eight; Owen County Elementary, eight; and Walton Verona Elementary, eight. Ludlow High School found it impossible to continue with the study program.

The suburban laboratory school, Caywood Elementary, has moved into a team teaching organization as a technique to bring about a continuous progress or nongraded program. Teams meet regularly each morning to plan for continuous progress of each child in the team. Teaming is moving forward by steps. Each team selected one area for a beginning. As competencies are developed they will move to include another area.

The urban laboratory school, Third District, Covington, has moved into a team teaching nongraded program, meeting regularly 30 to 45 minutes each morning before school for team planning. The faculty is experimenting with techniques of individualizing the instructional program. They have developed a system of evaluation and reporting pupil progress to replace the traditional report card and grading system.

The rural laboratory school, Pendleton High School is using computerized flexible modular scheduling. The schedule consists of nineteen, twenty-minute modules utilizing team teaching, large group instruction, small group instruction, laboratory instruction, and independent study or unscheduled time. Forty percent of the students' time is unscheduled by the computer, and may be spent in the various resource centers, laboratories, shops, or library according to the open school concept which opens all the resources of the school to the student.

Satellite school faculties held their own study sessions throughout the year. Some satellite schools are moving in the same direction as their laboratory school counterpart.

Visitations have been approved in increasing numbers in many school districts this year. Many are using the Laboratory and Satellite Schools for visitation, as well as other innovative programs out of the Region. The teachers' visitation program has encouraged the diffusion of innovations in in-service education and school program improvement.

In addition to the Laboratory and Satellite School Programs in-service programs are being developed through the in-service coordinator wherever they are requested. In most cases these are system-wide, but in

some districts, when individual schools develop their own in-service programs, work has been with the individual schools who have made their requests through their principals or supervisors.

In this third year of our operation many of the schools and school systems that we had worked with in continuing in-service programs in the past have continued the programs on their own. Only two or three school systems may be said to have retrogressed to the traditional type of in-service activity. We continue to work with Owen County, Carroll County, Kenton County, Ft. Thomas, and Pendleton County on the same basis as before.

Consultant services have been approved for a large number of school districts. Consultants have been employed by the various local school districts to serve in developing procedures to help the school districts develop instruction programs specifically designed for their own students in their own communities. Consultants have assisted the laboratory schools in implementing and teaching new programs. Consultants have given advice in the planning and administration of the project.

The mobile video-taping unit has been received with enthusiasm by many in and outside the Region. The mobile unit has been used for projects such as:

a) informing a community of a school's program either with tapes of another school or the community school after taping the daily routine,

b) to give information on innovations to teachers at group meetings,

c) to provide video-tapes of consultants when a consultant cannot be there.

The list of services is being lengthened as more people find the mobile unit helpful in furthering innovations and school relations.

Diffusion seminars for laboratory and satellite school principals and their supervisors were held monthly to exchange ideas and see new programs in operation. The group met in each laboratory school and most of the satellite schools.

Two clinic work sessions were held for teachers in the Region. On January 11, a clinic work session was held at St. Thomas High School with 328 teachers in attendance and on April 29 a clinic work session was held at Turkey Foot School in Kenton County with 328 teachers in attendance

This project is designed to obtain a greater degree of cooperation among the various schools and school districts of the region for purposes of sharing services and programs. The twenty-two public and one parochial school districts are in very close proximity, and there is need for them to develop ways of sharing services and the costs of maintaining modern school programs.

The superintendents of the cooperating school districts serve as the Board of Directors for the Northern Kentucky In-Service Innovation Center. This group has held monthly meetings to review the progress of the project, chart future courses, and discuss problems of common concern.

The estimated cost of the evaluation for the project was computed as follows:

Thirty days of consultant time has been contracted for the Central Administration-Instruction Unit at $75.00 per day or $2,250.00, plus costs of testing, $2,754.00; salary of coordinator of evaluation, $14,000.00; a total of $19,004.00.

Evaluation of Teacher Visitation Program. Three hundred seventy-eight teachers participated in the teachers visitation program. These teachers represented sixteen of the twenty-three school districts in the region.

Evaluation of Consultant Use. A total of fifteen school districts participated in the consultant program. These school districts have utilized a total of fifty-nine consultant days.

Diffusion Seminars. Laboratory and Satellite school principals and their supervisors met with the Northern Kentucky In-Service Innovation Center staff members in monthly diffusion seminars. These seminars were rotated from one school to another in order for participants to see the various innovative programs in the Region.

Clinic Work Sessions. An in-service work clinic devoted to individualized reading was held in Region IV-A during January. There were 328 teachers and administrators in attendance at the reading work clinic. Ninety-nine percent of the participants evaluated the reading work clinic as excellent or good. Sixty-five percent of the participants stated that they plan to explore individualized reading further. In addition forty-six percent of the participants stated that they plan to try individualized reading in their own classrooms.

In April an in-service work clinic dealing with motivation and skill development through independent study and individualized instruction was held for the teachers and administrators of Region IV-A. Again, 328 teachers and administrators were in attendance at the work clinic. Eighty-eight percent of the patticipants felt that the work clinic was excellent or

good. Sixty-four percent of the participants stated that they plan to explore independent study and/or individualized instruction further. Over forty-eight percent of the participants revealed that they plan to try independent study and/or individualized instruction in their own classrooms.

Evaluation of In-Service Workshop. Several schools held in-service education workshops prior to the opening of school for the 1970-71 school year. Among these schools were three laboratory schools; Caywood Elementary, Third District Elementary, and Pendleton County High School. Five school systems with satellite schools held workshops. They were Cold Spring, Ruth Moyer, Owen County Elementary, St. Thomas and Walton-Verona. Three school systems held workshops. They were Grant County, Pendleton County and Campbell County.

Caywood Elementary School. This laboratory school held a workshop during the period of August 10-21. The purpose of the workshop was to prepare for new innovations that were to be incorporated in the activities of the 1970-71 school year. Both consultants evaluated workshop as excellent.

Third District Elementary. This laboratory school held an in-service education workshop during August 24 - 28. The purpose of the workshop was to prepare the teachers for team teaching and continuous progress program.

Pendleton County High School. This secondary laboratory school held an in-service education workshop during August 24 - 26. The purpose of the workshop was to prepare and refine the flexible modular scheduling which was implemented the previous year. This workshop was evaluated as excellent.

Cold Spring Elementary. This satellite school held an in-service education workshop during August 13 - 19. The purposes of this workshop

were utilization of educational media and implementing an individualized reading program. Both consultants evaluated the workshop as excellent.

Ruth Moyer Elementary. This satellite school held an in-service education workshop during August, 1971. The purpose of this workshop was to implement individualized reading. Consultant evaluated this workshop as good.

Owen County Elementary. This satellite school held an in-service workshop during August 24 - 28. The purpose of this workshop was to prepare to move into an open concept, nongraded, continuous progress situation, and was evaluated as excellent.

St. Thomas Elementary. This satellite school held an in-service workshop on June 6, 7, 15 and 16. The purpose of this workshop was to implement individualized reading, and to develop a facility in group dynamics. Both consultants evaluated the workshop as excellent.

Walton-Verona Elementary. This satellite school held an in-service workshop during June 1 - 3. The purpose of this workshop was to implement an individualized reading program and it was evaluated as very good.

Grant County Schools. The Grant County school system held a one day workshop on August 27, 1970. The purpose of the workshop was to learn about programmed instruction, which was evaluated as fair.

Pendleton County Schools. The Pendleton County school system held a workshop on November 12 and 13. The purpose of the workshop was to become familiar with open concept, continuous progress program and was evaluated excellent.

Campbell County Schools. The Campbell County School System held a workshop on August 20. The purpose of the workshop was to become familiar with the need for individualized reading. The consultant evaluated this workshop as good.

Evaluation of Project Staff Performance. Each project staff member keeps a daily log of activities which provides a continuing assessment of each staff member in relationship to his job assignment, which makes it possible to improve his effectiveness.

II. This section describes project endeavors in which the anticipated results have exceeded expectations, and those in which the results have not measured up to expectations.

The project outcomes which have exceeded expectations are as follows:

1) The extent of cooperation between and among schools and school districts has exceeded expectations. Schools which in the past have taken greater advantage of offerings than have others in a district have shown willingness to reduce their own utilization in order that others might increase theirs. Also, districts have been willing to combine to engage consultants that neither could afford alone.

2) The Laboratory Schools, after slow starts, in each case, have finally achieved the organizational and instructional goals they had set for themselves. The enthusiasm and dedication of the teachers and administrators in each, as well as the improved attitudes of the students, exceed expectations.

3) Satellite School participation, in some cases, has been greater than expected. The type of involvement they have

had (meetings of their total staffs to plan and implement) has been more conducive to success than having this involvement just on a representative basis, as was done in preceding years.

4) The "Peripheral" or "other" schools of the region have made good use of the visitation and consultant services which the program offers, and these have, for the most part, been related to a developing program working toward more and better individualization of instruction.

5) The principals' and supervisors' dissemination seminars, inaugurated this (third) year, have exceeded expectations, in that they have made these leaders more willing to admit to problems whose solutions have been difficult and to share ideas for solution and follow up on outcomes. Principals have involved teachers in presentations to the group, and the whole result has been to increase pride and awareness, as accomplishment has been recognized.

6) The regional teachers' clinics have perhaps exceeded expectations to a greater extent than has any other facet of the program. With no funds budgeted for these work-sessions, either for consultants or for stipends, participation has had to depend upon dedication alone for its success. Teachers with know-how in appropriate areas volunteered to act as consultants without hesitation Two work-clinics were held, and 328 teachers attended each--without stipends, with obvious

enjoyment and interest, and with a quality of evaluation-response that gave unqualified endorsement of the clinics.

Some of the results in this project have not measured up to expectations. On the positive side, in the Laboratory Schools and in many of the Satellite Schools as well as in some of the Peripheral Schools, real changes have been made in many facets of the school program. There have been developments in, or leading toward, such things as team teaching, non-gradedness, grouping, continuous progress, and flexible modular scheduling. These have been increasing appreciation and use of all sorts of teaching aids (including Teacher Aides); and there has been increasing awareness that the only valid purpose for an innovative program is to individualize instruction. However, results have not measured up to expectations in that nowhere has the goal of complete individualization been achieved. The improvements which have been accomplished have been organizational and attitudinal in nature--and basic to accomplishment of the project's purpose; but the ultimate goal of a truly individualized program of instruction has not yet been reached in any school.

III. This section describes the effects of the project on the educational institution or agency by discussing the greatest changes resulting from the project.

The greatest change resulting from the project continues to be in the attitude toward change and the attitude toward children. Pre-project data and observations indicated that most in-service education programs designed to bring about change were initiated by the administration, planned by the administration, and carried out by the administration. Classrooms and school programs seemed to be organized in a particular way because it was administratively feasible.

This basic attitude toward responsibility for change has taken an almost complete reversal in some school districts with strong evidence to indicate that similar things are happening in many others. The laboratory school faculties have had an influence on some satellite schools that has spread through their district.

In one school district, for example, in which a bond issue was passed for the purpose of consolidating all the small elementary schools into one county school, the teachers became involved in planning the program, planning the new facility, and implementing the program in the new facility based on identified needs of the children.

In another school district management teams consisting of the superintendent, a school board member, principal, teachers, and lay citizens were organized to review recommendations of individual school faculties and plan facilities accordingly.

Changed attitudes toward children have begun to be noticed since the first teacher clinics, with their emphasis on analysis of pupils. These seemed to be effective in bringing about enthusiasm for adequate identification of pupil needs, for purposes of curriculum improvement. The clinics of the second year built on this enthusiasm as they assumed that teachers and administrators were identifying innovative programs tending toward greater individualization of instruction than do the traditional approaches, and helped them to find ways to overcome any stumbling blocks interfering with their progress. With this reinforcement, and with the enthusiasm that had been generated, many school faculties began getting involved in this kind of study, requesting

consultant services, and finding visitation sites that would help them as they moved toward new programs which more nearly met the individual needs of their pupils.

This enthusiasm has continued as evidenced by participation in voluntary clinic work sessions held during the current year. Over three hundred teachers voluntarily participated in each of these clinics which dealt with individualized reading and individualized instruction.

IV. This section identifies those Community Agencies that cooperated in the project:

Ky Association for Supervision & Curriculum Development
Miami University - Oxford, Ohio
Northern Kentucky Community Action Commission
Catholic Social Service Bureau
Comprehensive Care Center
County Health Departments
Northern Ky Agencies Representatives Association
Southern Illinois University
Eastern Ky State University
Morehead State University
University of Cincinnati
Indiana University
University of Kentucky
University of Missouri
Ky State Department of Education
Ky Innovative Development Center
Title III Project - Region I
Title III Project - Region II
Title III Project - Region IV B
Title III Project - Region V
Title III Project - Region VI
Title III Project - Region VII
White House Conference for Children and Youth
Ohio State University
Xavier University
Thomas More College
Northern Kentucky State College
Northern Kentucky Y.M.C.A.
Governor Conference on Drug Abuse.
Murray State University

The social and health agencies have provided help to teachers and administrators as they worked both diagnostically and therapeutically to try to identify and meet the needs of individual children.

The universities have supplied the staff with generous quantities of consultant help, and with advice and know-how. They have served in these same capacities with the faculties of the Laboratory Schools, with faculties of Satellite and Peripheral Schools, and individual school districts.

The State Department of Education has provided resources and techniques for evaluation, dissemination, personnel training, and consultants. This help has been most generous, original and helpful.

The Staff of Kentucky Innovative Development Center has been helpful on several occasions in dealing with various phases of comprehensive educational planning.

The Title III Projects mentioned have shared valuable techniques (as on data gathering, new programs); advice (on video equipment, tapes); and instruments (as on evaluation, consultant use, visitation, and curriculum packets).

The Advisory Council includes representatives of several of the above groups, so this is an additional area in which these groups have cooperated and helped to give direction.

The membership of this Advisory Council is as follows:

Dr. Arthur Cotterill	Kentucky Innovative Development Center
A. J. Hauselman	Dept. of Community Colleges, Univ. of Ky.
Father Joseph A. Browne	Catholic Social Service Bureau
Dr. Joseph Willett	Comprehensive Care Center
Fermon Knox	Community Action Commission
D. C. Anderson	Ky. Department of Education
Don Davis, Exec. Sec'y	Northern Ky. Education Association

Following is a list of the local educational agencies and counties which were served by the project:

Boone County School District
Walton-Verona Independent School District
Augusta Independent School District
Campbell County School District
Bellevue Independent School District
Dayton Independent School District
Ft. Thomas Independent School District
Newport Independent School District
Silver Grove Independent School District
Southgate Independent School District
Carroll County School District
Gallatin County School District
Grant County School District
Williamstown Independent School District
Kenton County School District
Beechwood Independent School District
Covington Independent School District
Erlanger Independent School District
Ludlow Independent School District
Owen County School District
Pendleton County School District
Trimble County School District
Covington Diocese

There have been no changes in the above list of participating educational agencies since the first continuation project.

V. This section discusses how the project information was disseminated, including such information as (1) the number of unsolicited requests for information; (2) the number of visitors from outside the project area; and (3) the estimated cost of such dissemination. Two copies of each item disseminated by our project are submitted herewith.

Project information was disseminated through various means. Such means for dissemination include built-in provisions for the dissemination of information about the project through the organizational structure, teacher visitation, video taping of activities and programs, color slide programs, regional clinics, and central unit publications and brochures.

Teacher visitation. The teacher visitation program was set up and developed to involve all the school districts in the region. Teacher visitation days were allocated to each district according to the number

of teachers employed in each district. A Total of 378 teachers participated in the teacher visitation program. These teachers represented 16 of 23 school districts in the region.

Video-Taping. The video taping equipment was used to tape several activities and programs in the project. The video taping of consultants' presentations was done for future use in the region. Tapes were produced and displayed for any teacher or administrator in the region upon request. Not only did the elementary and secondary teachers in the region request video taping services, but college instructors as well. Four local colleges and universities made use of the video-taping services for teacher preparation classes.

Color Slide Programs. Programs were also disseminated by means of color slide presentations. The project staff worked together to produce a slide program illustrating Individualized Reading. Also produced were slide programs for two satellite schools and one laboratory school. These slide programs were used by the individual schools to help describe their innovative programs to visitors and interested people in the community.

Principals and Supervisors Seminars. The principals and supervisors of the laboratory and satellite schools met monthly to discuss problems and share ideas and solutions to their problems. Each month the seminar was conducted at a different laboratory or satellite school. Members of the host school's faculty would present their program to the principals and supervisors.

Regional Teacher Clinics. Two work-clinics were conducted this past year with 328 teachers in attendance at each. The first of these clinics

dealt with "Individualized Reading." This clinic was for the teachers in the elementary grade levels. The second clinic was open to both elementary and secondary teachers and the subject was " Motivation and Skill Development through Independent Study and Individualized Instruction."

No teacher stipends or consultant fees were paid for the clinics. The group leaders were teachers from the region who volunteered their time and efforts to share successful ideas with their fellow educators. The success of the clinics was beyond expectation.

Central Unit Publications and Brochures. The project's newsletter was published six times this past year. The newsletter served as an informative tool to disseminate information about the project and programs within the region.

One brochure was published and distributed to the region. The brochure was published in cooperation with the St. Thomas Elementary School faculty and the Project Staff.

Unsolicited Requests. There were several unsolicited requests for information about the project. There were several out-of-state requests in addition to those from within the state.

Visitors from Outside the Project Area. Several visitors from outside the project have visited the project. In particular, Pendleton High School and Owen County Elementary have had much visitation from outside Region IV-A. Pendleton High School registered sixty out-of-state visitors and one hundred twenty-seven out-of-region visitors; Owen County Elementary registered twenty-five out-of-state visitors and one hundred and three out-of-region visitors. There were many visitors from within the region who

visited the two schools mentioned as well as many of the other laboratory and satellite schools.

Cost. Because all activities focus toward in-service education and many of these activities are in themselves media for dissemination, the actual cost of dissemination cannot be accurately projected.

VI. Describe the methods and procedures being developed to carry the project forward without Federal support after the designated approval period.

Since this is an in-service project, and since, therefore, any accomplishments are the result of hard work on the part of individual faculties in preparing for the implementation of innovative programs, this is where the carry-over assurance is to be found. When a continuing in-service program is entered into whole-heartedly by a total faculty; when stipends are paid to compensate teachers (even if only partially) for their time; when consultantive help is readily available; and when it is possible for teachers to visit and observe innovative programs in action, it is a foregone conclusion that momentum will carry the innovative program forward. The enthusiasm generated and new techniques for teacher-group activity will keep the program moving ahead, whether or not there is further Federal support, in every school in which an innovative program has been implemented. All the Laboratory Schools, most of the Satellite Schools, and many Peripheral Schools have such innovative programs, and all plan to continue them.

Another objective of the project has been to increase all types of cooperation among the superintendents and the school districts. Title III has cooperated with Title V in identifying and implementing areas of concern in this region. This has led to an increase in cooperation between the two Titles, and, through this, between the superintendents concerned.

Since these developments, the superintendents and the school districts seem to find cooperation easier, and will probably continue in this direction without Federal support, and it is possible that the merging of certain facilities, personnel, or equipment might result. Meanwhile, the superintendents of the region have indicated they wish to cooperate as directors of a second three-year project, and hope that further opportunities will develop.

VII. Budget Summary:

$ 123,706.99	Total Cost
$ -0-	Total Non Federal Support
$ 123,706.99	Total Federal Support under Title III
$ -0-	Total Federal Support Other Than Title III

KENTUCKY DEPARTMENT OF EDUCATION
FRANKFORT, KENTUCKY 40601

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PROPOSED BUDGET SUMMARY/EXPENDITURE REPORT OF FEDERAL FUNDS

Title III, Elementary and Secondary Education Act of 1965 - Supplementary Centers and Services Program

(NOTE: Please read the attached instructions before completing this form)

NAME AND ADDRESS OF AGENCY: Campbell County Board of Education, Alexandria, Ky 41001

PROJECT NUMBER: 27-68-0001-3

GRANT NUMBER: 091-0001-1

STATE: Kentucky

PART I – EXPENDITURES (other than construction)

(Check One) ☐ PROPOSED BUDGET SUMMARY (ATTACH DETAIL SCHEDULES) ☐ ESTIMATED EXPENDITURE REPORT ☒ FINAL EXPENDITURE REPORT

BUDGET PERIOD (MONTH, DAY, & YEAR) BEG: 7-1-70 END: 8-31-71

EXPENDITURE ACCOUNTS		EXPENSE CLASSIFICATION								
FUNCTIONAL CLASSIFICATION	ACC'T NO.	SALARIES		CONTRACTED SERVICES	MATERIALS AND SUPPLIES	TRAVEL	EQUIPMENT	OTHER EXPENSES	TOTAL EXPENDITURES	NEGOTIATED BUDGET
		PROFESSIONAL	NON-PROFESSIONAL							
1	2	3	4	5	6	7	8	9	10	11
1 ADMINISTRATION	100	$12,083.31	$ 5,632.00	$ 1,650.00	$ 374.42	$ 645.09	$	$ 53.96	$20,438.78	$20,438.78
2 INSTRUCTION	200	42,483.38		41,703.88	9,526.03	3,856.49		449.71	98,019.49	98,019.49
3 ATTENDANCE SERVICES	300									
4 HEALTH SERVICES	400									
5 PUPIL TRANSPORTATION SERVICES	500									
6 OPERATION OF PLANT	600									
7 MAINTENANCE OF PLANT	700							455.38	455.38	455.38
8 FIXED CHARGES	800							558.92	558.92	588.92
9 FOOD SERVICES	900							4,234.42	4,234.42	4,234.42
10 STUDENT-BODY ACTIVITIES	1000									
11 COMMUNITY SERVICES	1100									
12 REMODELING (IF COSTS TOTAL MORE THAN $2000 ENTER IN PART II)	1220c									
13 CAPITAL OUTLAY (EQUIPMENT ONLY)	1230									
14 TOTAL →		$54,566.69	$5,632.00	$43,353.88	$9,900.45	$4,501.58	$	$5,752.39	$123,706.99	$123,706.99
15 NEGOTIATED BUDGET →		$54,566.69	$5,632.00	$43,353.88	$9,900.45	$4,501.58	$	$5,752.39	XXXXXXXXXXXXX	$123,706.99

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PART II – CONSTRUCTION EXPENDITURES

(Check One)
- ☐ PROPOSED BUDGET SUMMARY
- ☐ ESTIMATED EXPENDITURE REPORT
- ☐ FINAL EXPENDITURE REPORT

BUDGET PERIOD (Month, Day, & Year)
BEGINNING:
ENDING:

	EXPENDITURE ACCOUNTS	ACC'T NUMBER	AMOUNT	NEGOTIATED BUDGET
	1	2	3	4
1	SITES			
	A PROFESSIONAL SERVICES	1210a	$	$
	B IMPROVEMENT TO SITES	1210c		
2	BUILDINGS			
	A PROFESSIONAL SERVICES	1220a		
	B NEW BUILDINGS AND BUILDING ADDITIONS	1220b		
	C REMODELING (IF $2,000 OR LESS ENTER IN PART II	1220c		
3	ADMINISTRATIVE EXPENSES (Specify below)	1220		
	A			
	B			
4	LEASING OF FACILITIES			
5	TOTAL →		$	$

PART III – SUMMARY - AUTHORIZATIONS, EXPENDITURES, AND BALANCES OF TITLE III ESEA FUNDS

BUDGET PERIOD (Month, Day, and Year)
BEGINNING: 7-1-70 ENDING: 8-31-71

- ☐ ESTIMATED EXPENDITURE REPORT
- ☒ FINAL EXPENDITURE REPORT

		PART I - EXPENDITURES OTHER THAN CONSTRUCTION	PART II CONSTRUCTION EXPENDITURES	TOTAL
	1	2	3	4
1	AMOUNT AUTHORIZED FOR EXPENDITURE FOR BUDGET PERIOD SHOWN ABOVE →	123,706.99		123,706.99
	A UNEXPENDED FUNDS FROM GRANT AWARDED FOR PRIOR BUDGET PERIOD $			
	B APPROVED GRANT AWARD FOR BUDGET PERIOD SHOWN ABOVE 123,706.99 $			
	C TOTAL FUNDS AUTHORIZED FOR BUDGET PERIOD ABOVE (SAME AS ITEM 1, COL. 4) 123,706.99 $			
2	EXPENDITURES DURING BUDGET PERIOD SHOWN ABOVE →	123,706.99		123,706.99
3	UNEXPENDED BALANCE OF FUNDS AUTHORIZED FOR EXPENDITURE DURING BUDGET PERIOD SHOWN ABOVE (ITEM 1 MINUS ITEM 2) →			

PART IV – CUMULATIVE TOTALS - GRANT AWARDS AND CASH RECEIVED SINCE INCEPTION OF PROJECT

	ITEMS	CUMULATIVE TOTAL TO DATE
1	GRANT AWARDS	
2	CASH RECEIVED	

THIS FISCAL REPORT IS CORRECT AND THE EXPENDITURES INCLUDED HEREIN ARE DEEMED PROPERLY CHARGEABLE TO THE GRANT AWARD.

SIGNATURE OF PROJECT FISCAL OFFICER: Charles E. McCormick — DATE: 9-24-71

SIGNATURE OF PROJECT DIRECTOR: Edward E. Ball — DATE: 9-24-71

FOR OFFICE OF EDUCATION USE ONLY

ACCOUNTING DATA

R T (1)	MAC. NO. (2)	F Y (3)	BATCH NO. (4-7)	COMMON ACCOUNTING NUMBER (8-15)	EFF DATE (16-18)	OBLIGATION NUMBER (19-33)	TRANS. CODE (34-36)	AMOUNT (Dollars & Cents) (37-48)	REG. SYM (49)	OBJECT CLASS (50-53)	VENDOR NUMBER (54-63)

VOUCHER SCHEDULE NUMBER (64-71)	GOVT. NON-GOVT. (72)	PROGRAM CODES SCI/NON-SCI (73-74)	PROGRAM CODES BAL PAY (75-76)	CNTRL FUND (77)	REC COUNT (78-80)	APPROPRIATION SYMBOL	ALLOTMENT NUMBER	P P B NUMBER

PART III--EVALUATION REPORT

End-of-year Report

SECTION A. FINAL EVALUATION

This section is presented as an evaluation of the third and final year of this project. Four major objectives or purposes were proposed for this year:*

I. To develop ways of speeding up the processes whereby a school staff not only learns how to, but actually completes the task of: (a) analyzing their pupil needs, curricula and instructional procedures; (b) developing designs and strategies for changing these three areas and (c) testing changes in the schools themselves. To accomplish this major objective more specific objectives are:

   A. To refine and intensify the development of the three laboratory schools being used as learning laboratories;

   B. To devise improved ways of working with staffs within the satellite schools attached to each laboratory school;

   C. To develop other means and intensify efforts to secure innovation implementation among both the satellite and peripheral schools within the region.

II. To expand the use of the laboratory schools as demonstration centers for innovative curricula, instructional pupil personnel development programs. This thrust would be toward providing examples of exemplary program development processes for investigation and regional diffusion;

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*These objectives were cited in Part III, but are repeated here to provide continuity for the rationale to follow.

III. To devise methods for involving all schools in a more intensive effort to engage in this type of self-improvement via analysis of current status, design of new programs and the testing-evaluation of the new programs;

IV. To extend the level of cooperation among the twenty-two public and one parochial school districts in the region so that there are developed appropriate ways of sharing services and costs of maintaining school programs.

After approval of the project an effort was made to restate the above objectives in behavioral or performance terms. An Evaluation Conference for all Kentucky Title III projects was called by the Director of Evaluation, Title III, Kentucky Department of Education at which time the staff of the Region IV-A project participated in re-stating these objectives (see Appendix A). In March, a program audit team, directed by a consultant from EPIC Diversified Systems Corporation, suggested the following:

1. That evaluation information from the current project, and other available needs assessment data be utilized as a means of determining the future thrust of Title III funded programs in the region.
2. That the project objectives be reviewed in light of the suggestions offered in this report.
3. That more specific measurement criteria and evaluation design be developed for assessing the attainment of the project objectives.

The project staff and Board of Directors are in agreement that both of these events served to aid in obtaining greater specificity in stating the objectives; however, the last event--the audit visit--came too late in the project period for implementing the recommendations therefrom. These recommendations did have the effect of causing some re-thinking of the whole structure and explicitness of the objectives as stated in the June revision. This re-thinking process resulted in a thorough review of the intent of the final project year, and this review resulted in the development of the format, or structure, upon which the project was finally evaluated. This format is an extrapolation from the original intent of the project as originally proposed, though it also provides evaluation in terms of both the re-stated objectives as developed in June, 1970 and the recommendations made in March, 1971.

The purpose of the entire three-year project was to develop in-service teacher education procedures to increase the professional competence of personnel in the region. Thus, the project's objectives have been concerned with obtaining an optimum level of staff participation in program change processes in real "school laboratories."

The format for the remainder of this report is based on: (1) a statement of each purpose of the project, (2) specific objectives related to each purpose, (3) the presentation of evaluation data related to each set of objectives, and (4) a summary or synthesis of the outcomes of the project.

Purposes and Objectives

Purpose

To refine and intensify the development of the three laboratory schools being used as learning laboratories for teachers.

Objectives

1.01--The teachers will demonstrate a more positive regard for pupils as measured by the Minnesota Teacher Attitude Inventory.

1.02--Students will demonstrate a positive attitude toward the school as determined by the Bell School Adjustment Inventory.

1.03--Students will achieve at their expected levels, as measured by standardized testing, even though their teachers are being engaged in in-service education.

1.04--Teachers will learn to develop new instructional patterns as determined by the actual implementation of programs characterized by these new patterns.

1.05--Teachers will evidence a more positive regard for continuous pupil progress in school as determined by decreased retention rates.

Purpose

To devise improved ways of working with staffs within the satellite and peripheral schools so as to increase their competence in program improvement.

Objectives

2.01--The principals and their supervisors of the satellite and laboratory schools will respond positively to monthly leadership seminars as determined by an evaluation form developed for this purpose.

2.02--The teachers of this region will respond positively to project sponsored in-service activities and materials as evidenced by monitoring reports.

Purpose

To provide examples of exemplary school programs for regional diffusion and to provide information on such programs for in-service teacher growth.

Objectives

3.01--The laboratory schools will develop exemplary demonstration programs as evidenced by monitoring reports and regional visitation.

3.02--The school districts of this region will take advantage of the teacher visitation program as evidenced by reports of their participation.

Purpose

To extend the level of cooperation among the twenty-two public and one non-public districts so that there are developed ways of sharing services and information.

Objectives

4.01--Superintendents will demonstrate a desire to cooperate in sharing ideas for regional school improvement as evidenced by attendance and participation in meetings of the Board of Directors.

4.02--Superintendents will demonstrate their concern for regional involvement by providing leadership for the inclusion of lay citizens in program development as evidenced by their participation in a related Title V, 503 project.

DATA PRESENTATION

This section deals with the evaluation data collected in relationship to each of the revised project objectives.

Objective 1.01

(The teachers will demonstrate a more positive regard for pupils as measured by the Minnesota Teacher Attitude Inventory)

Two separate studies employing the MTAI were completed during the three years of this project. The first study (1968-69) was assigned to Joseph D. Gormley and the summarized findings reported in the End of Budget Period Report, September, 1969. The second study was assigned to Leonard D. Ralph and conducted during the 1970-71 project year. The first study is mentioned because Ralph used Gormley's data as baseline for his study.

Ralph drew a sample teacher population from each of the three types of schools--urban, suburban, rural--and administered the MTAI two years after Gormley's administration to the same sample. The following excerpts from Ralph's study should provide sufficient understanding of his study methods:

> This study has been limited to the cooperating teachers of: (1) the three laboratory schools selected by the staff of the Northern Kentucky In-Service Innovation Center, (2) three satellite--one matched with each laboratory school--and (3) three peripheral schools--one matched with each of the laboratory schools.
>
> The study was further limited to the cooperating teachers in the nine laboratory, satellite and peripheral schools for whom pre-involvement data regarding attitude and dogmatism were available. A major antecedent to this research effort was

the study conducted by Gormley during 1968 and the spring of 1969 utilizing the same school staffs. Gormley collected data on the attitudes and levels of dogmatism of participating teachers prior to in-service involvement and again six months later. He analyzed these data to determine the changes in the attitudes of teachers following in-service involvement at differing levels of intensity. His study was particularly concerned with differential amounts of attitude change experienced by open- and closed-minded teachers. The data obtained by Gormley regarding the attitudes and level of dogmatism of teachers in the laboratory, satellite, and peripheral schools prior to in-service involvement provided the "base-line" data utilized in this study.[1]

Table 1 lists the number of teachers from laboratory, satellite, and peripheral schools that composed the sample for this study. The smaller number of respondents in the satellite school group is due primarily to the higher rate of teacher turn-over in those schools during the two years in in-service involvement.[2]

TABLE 1--THE NUMBER OF TEACHERS INCLUDED IN EACH IN-SERVICE GROUP

In-Service Group	Number of Teachers
Laboratory	43
Satellite	28
Peripheral	40
Total	111

[1]Joseph D. Gormley, "Dogmatism and Change in Teachers," (Unpublished Ed.D. dissertation, University of Kentucky, Lexington, 1969).

[2]Leonard D. Ralph, "A Study of the Effects of In-Service Involvement on Selected Characteristics of Teachers," (Unpublished Ed.D. dissertation, University of Kentucky, Lexington, 1971).

Ralph's findings, presented in terms of the hypotheses he used, are shown in the following excerpts:

Hypotheses 2, 6, 12, 16, 22 and 27: Change in Attitude

The null form of these hypotheses were tested by the four-factor analysis of variance procedure with mixed effects described in Chapter II to ascertain the statistical effects of the following design variables on pre-to-post-involvement Change in Attitude: (1) intensity of teacher involvement in innovative in-service activities, (2) entry-level dogmatism, (3) entry-level attitude and (4) differential amounts of change among individual schools. The results of this statistical procedure are presented in Table 4.

Hypothesis 2--The null form of this hypothesis stated that no significant effect on pre-to-post-involvement change in attitude would be observed attributable to intensity of involvement in innovative in-service activities. Referring to Table 4, one will observe that the F-ratio of 11.10 for the statistical effect of involvement exceeds the critical value required for significance ($p = .05$) at 2 and 6 degrees of freedom; therefore, the null hypothesis was rejected at the .95 level of confidence. Since the analysis of variance procedure revealed the presence of a significant difference among means, the Tukey-Method was utilized to determine the exact location of significant differences and to establish a set of simultaneous confidence intervals for the differences between sample means. Table 5 presents the results of this statistical procedure. The simultaneous confidence intervals established around the difference between sample means indicates a .95 probability that all of the contrasts shown include within their intervals the real value of the difference between the contrasted populations.

Group 1, the laboratory schools, experienced pre-to-post-involvement change ($p = .05$) in attitude which was significantly different from that experienced by either Group 2, the satellite schools, or Group 3, the peripheral schools.

TABLE 4--ANALYSIS OF VARIANCE OF CHANGE IN ATTITUDE RELATED TO ENTRY-LEVEL DOGMATISM AND ATTITUDE AND INTENSITY OF INVOLVEMENT IN INNOVATIVE IN-SERVICE ACTIVITIES

Source of Variance	Degrees of Freedom	Sums of Squares	Mean Squares	F
Between Schools:	8			
Involvement	2	3605.33	1802.67	11.10*
Schools: Involv.	6	974.17	162.36	0.41
Within Schools:	63			
Dogmatism	1	128.00	128.00	0.13
Attitude	1	9.39	9.39	0.05
Involv. x Dogmat.	2	1922.33	961.17	3.60
Involv. x Attit.	2	343.11	171.56	0.40
Sch. x Dogmat. Involv.	6	1604.17	267.36	0.69
Sch. x Attit. Involv.	6	2555.50	425.92	1.09
Dogmat. x Attit.	1	722.00	722.00	6.26*
Involv. x Dogmat. x Attit.	2	20.33	10.17	0.09
Sch. x Dogmat. x Attit. Involv.	6	692.17	115.36	0.30
Replication	36			
Total	71			

$F_{.95}(2,6) = 5.14$ $\quad F_{.95}(1,2) = 18.51$

$F_{.95}(6,36) = 2.36$ $\quad F_{.95}(1,6) = 5.99$

*Significant at the .05 level.

TABLE 5--LOCATION OF SIGNIFICANT DIFFERENCES IN PRE-TO-POST INVOLVEMENT CHANGE IN ATTITUDE

(In-service groups indicated by subscripts)

Contrasts	$1-\alpha q_{3,3(24-1)}\left(\sqrt{162.36/24}\right)$	Simultaneous Confidence Intervals
$\bar{X}_1 - \bar{X}_2 = 14.67$	$(3.39)(2.60) = 8.81$	$14.67 \pm 8.81 = (23.48, 5.86)$**
$\bar{X}_1 - \bar{X}_3 = 15.33$	8.81	$15.33 \pm 8.81 = (24.14, 6.52)$**
$\bar{X}_2 - \bar{X}_3 = 0.66$	8.81	$0.66 \pm 8.81 = (9.47, -8.15)$

** = .05 level of significance

Group 1, the laboratory schools, manifested the most favorable change in teachers' attitudes toward students. A confidence interval of 23.48 to 5.86 was established around the difference of 14.67 points found between the means of Groups 1 and 2. A confidence interval of 24.14 to 6.52 was established around the difference of 15.33 points found between Groups 1 and 3. No significant difference was found between satellite and peripheral schools.

Figure 5 illustrates the mean change in MTAI scores experienced by teachers in the three in-service groups. The laboratory school group experienced favorable change in teachers' attitudes toward students as measured by the MTAI at the notable level of 20.25 points per teacher for the two-year period of in-service involvement. The satellite school group experienced an average change of 5.58 points per teacher and the peripheral school group only 4.92 points per teacher during the same time period.

FIGURE 5--PRE-TO-POST-INVOLVEMENT CHANGE IN MTAI SCORES OF TEACHERS GROUPED BY IN-SERVICE TYPE

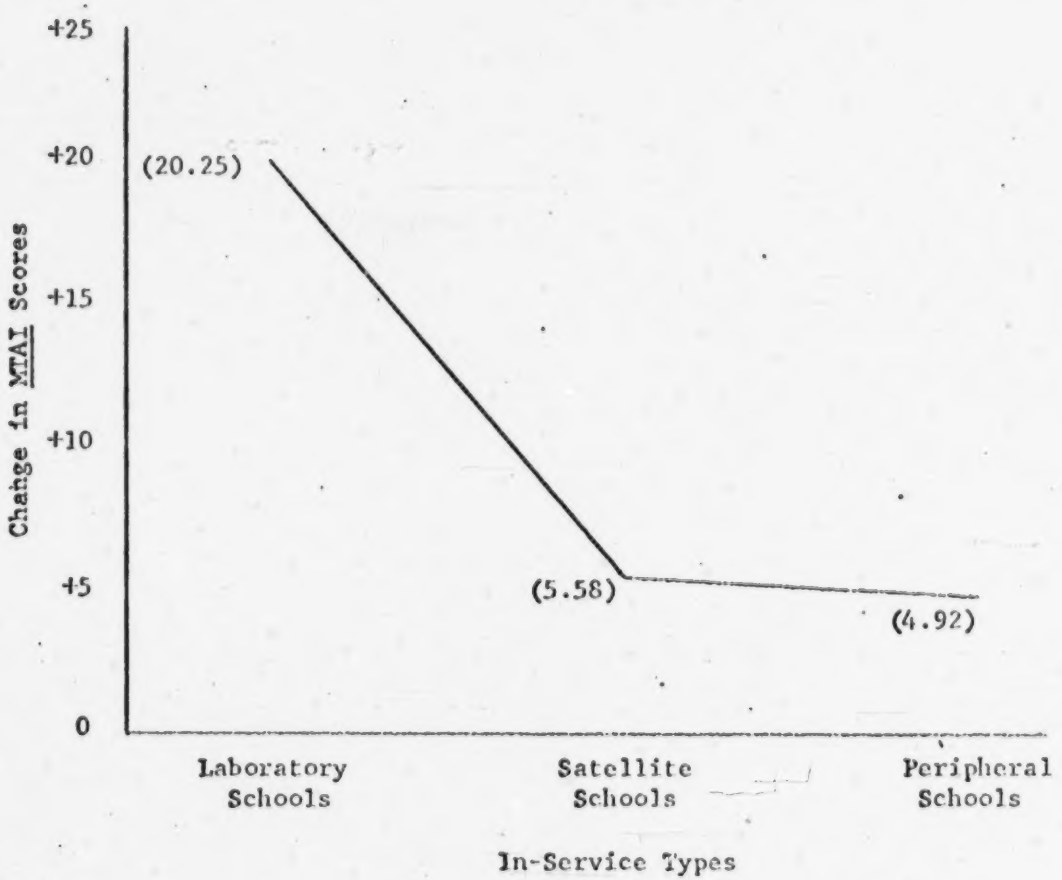
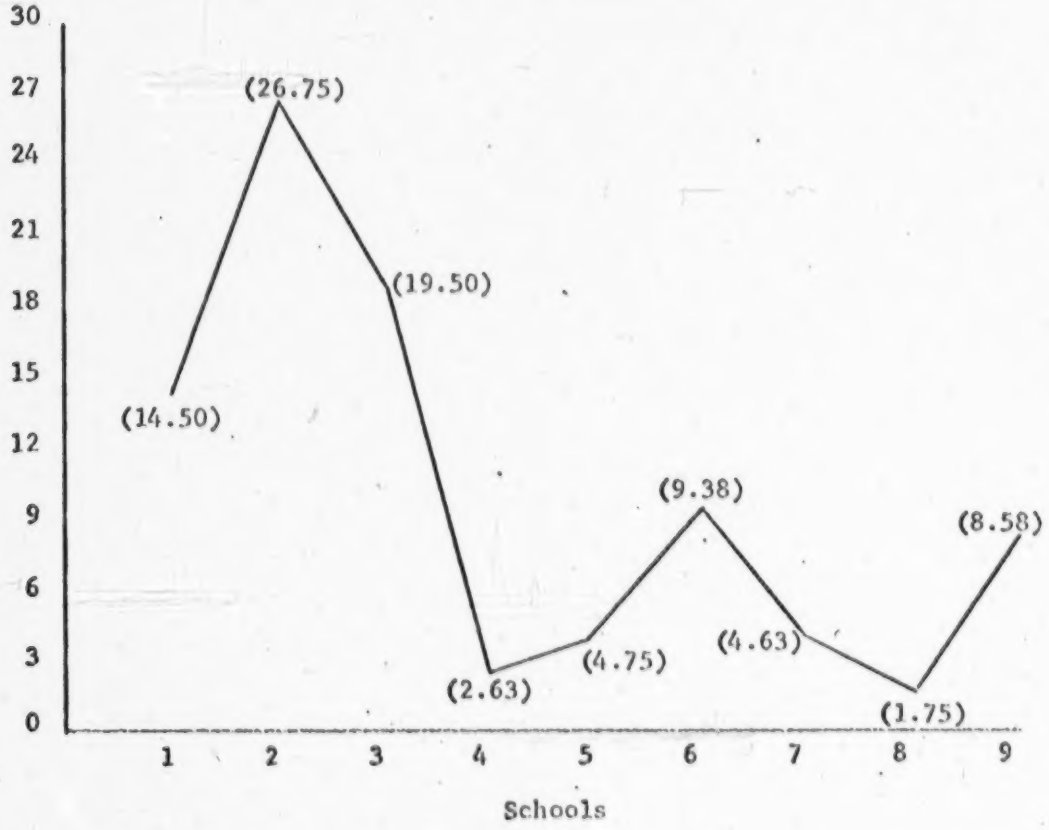


Figure 6 illustrates the mean change in MTAI scores experienced by teachers in each of the nine schools in the study following two years of in-service involvement. One will readily observe that schools 1, 2, and 3, the laboratory schools, each experienced substantially more favorable change than did those schools in either the satellite or peripheral groups.

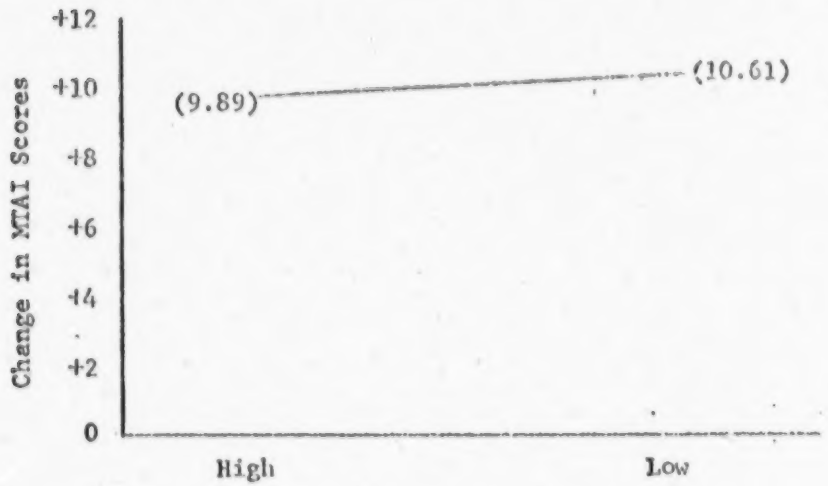
FIGURE 6--PRE-TO-POST-INVOLVEMENT CHANGE IN MTAI SCORES OF TEACHERS GROUPED BY SCHOOLS



Schools 1-3 Laboratory Schools
Schools 4-6 Satellite Schools
Schools 7-9 Peripheral Schools

Hypothesis 6--The null form of this hypothesis stated that no significant difference in pre-to-post-involvement change in attitudes would be observed attributable to entry-level attitude. Since the F-ratio for statistical effect of entry-level attitude shown in Table 4 is below the critical value required for significance ($p = .05$) at 1 and 2 degrees of freedom it was not possible to reject the null hypothesis. As Figure 7 illustrates, an examination of mean change scores reveals that those teachers with comparatively high entry-level attitude scores experienced very slightly less change in attitude than did those teachers having comparatively low scores.[3]

FIGURE 7--PRE-TO-POST INVOLVEMENT CHANGE IN MTAI SCORES OF TEACHERS GROUPED ON THE BASIS OF ENTRY-LEVEL MTAI SCORES



[3]Mean entry level dogmatism scores for the three in-service groups were as follows: Laboratory Schools, 51.35; Satellite Schools, 53.89; Peripheral Schools, 53.51.

While Ralph was examining the relationship between attitude, as measured by the MTAI, and teacher involvement in project sponsored in-service education activities, a simple table of pre-post MTAI scores should be elaborative. Table 1 shows the changes occurring in the MTAI scores from 1968 to 1970. (These scores are matched for each respondent.)

TABLE 1--PRE-POST MTAI SCORES

Laboratory Schools				Satellite Schools				Peripheral Schools			
Teacher	Pre Score	Post Score	Change	Teacher	Pre Score	Post Score	Change	Teacher	Pre Score	Post Score	Change
001	197	227	30	044	197	195	- 2	072	126	125	1
002	187	253	66	045	161	180	19	073	130	144	14
003	227	260	33	046	153	140	-13	074	193	200	7
004	230	245	15	047	139	150	11	075	245	249	4
005	194	208	14	048	127	142	15	076	127	144	17
006	137	157	20	049	169	130	-39	077	180	148	-32
007	196	192	- 4	050	176	163	-13	078	97	134	57
008	162	187	25	051	180	190	10	079	164	174	10
009	197	203	6	052	164	184	20	080	111	121	10
010	202	209	7	053	166	198	32	081	198	183	-15
011	211	197	-14	054	172	151	-21	082	160	188	28
012	229	205	-24	055	137	154	17	083	162	197	35
013	182	180	- 2	056	237	244	.7	084	94	122	28
014	150	152	2	057	168	155	-13	085	173	197	24
015	191	208	17	058	200	182	- 8	086	199	220	21
016	162	179	17	059	204	212	8	087	130	206	76
017	174	232	58	060	164	160	- 4	088	213	200	-13
018	160	160	00	061	181	188	7	089	118	125	6
019	156	110	-46	062	161	235	74	090	94	96	2
020	170	186	16	063	160	184	24	091	170	143	-27
021	236	223	-13	064	135	188	53	092	167	148	-19
022	173	160	-13	065	217	214	- 3	093	109	113	4
023	188	218	30	066	151	160	9	094	179	189	10
024	206	240	34	067	143	150	7	095	152	170	18
025	183	245	62	068	178	187	9	096	131	142	11
026	210	219	9	069	95	83	-12	097	155	151	- 4
027	200	217	17	070	126	96	-30	098	140	113	-27
028	218	231	13	071	118	145	27	099	182	196	4
029	190	186	- 4					100	125	157	32
030	192	196	4					101	121	140	19
031	224	257	33					102	245	261	36
032	178	220	42					103	115	168	53

Continued

TABLE 1--Continued

Laboratory Schools				Satellite Schools				Peripheral Schools			
Teacher	Pre Score	Post Score	Change	Teacher	Pre Score	Post Score	Change	Teacher	Pre Score	Post Score	Change
033	175	210	35					104	199	177	-22
034	207	210	3					105	189	159	-30
035	106	98	- 8					106	158	175	17
036	199	214	15					107	180	199	19
037	165	174	9					108	131	136	5
038	162	211	49					109	191	197	6
039	178	166	-12					110	192	211	19
040	199	245	46					111	167	197	30
041	125	153	28								
042	243	249	6								
043	211	236	25								

Table 1 also shows the amount of change, negative or positive, which occurred among these respondents' MTAI scores, Table 2 shows the mean changes of each group of teachers. Note that the Laboratory School teachers changed more positively and less negatively than the other two groups.

TABLE 2--MEAN CHANGE MTAI SCORES

School Group	Mean Positive Change N	$\bar{X}$	Mean Negative Change N	$\bar{X}$	Total N
Laboratory	32	24.6	10	14.0	43
Satellite	17	20.5	11	14.4	28
Peripheral	31	20.1	9	21.0	40
Totals	80	21.7	30	16.5	111

The preceeding data show quite clearly that Objective 1.01 was attained. The surprising result was the amount of positive change in attitude toward pupils that did occur. Ralph, in considering all positive and negative change scores, deduced that the Laboratory School group changed an average of 20.25 points, the Satellite School group

an average of 5.58 points, and the Peripheral School group an average of 4.92 points. However, as shown in Table 2, when separated into positive and negative change groups, the Laboratory School group averaged a 24.6 point change, the Satellite School group a 20.5 point change, and the Peripheral School group a 20.1 point change. Either way of interpretation, the change in attitude toward pupils is remarkable.

Objective 1.02

(Students will demonstrate a positive attitude toward the school as determined by the Bell School Adjustment Inventory.)

The Bell School Adjustment Inventory purports to describe quantitatively the attitude of pupils toward the school. "Students who make low scores tend to be well adapted to the school environment: they like their teachers, enjoy their fellow students, and feel that the school is conducted systematically and fairly. Students who make high scores tend to be poorly adapted to the school . . ."*

The inventory was administered in October, 1970 and again in May, 1971 to 365 students at Pendleton County High School and 40 sixth grade pupils at Third District School. (Both were laboratory schools. The elementary pupils were sampled even though the inventory is for secondary students primarily.)

Table 3 shows the pre- to post-score changes which occurred at Pendleton County High School.

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*Hugh M. Bell, Manual for The School Inventory, Consulting Psychologists Press, Inc., Palo Alto, California.

TABLE 3--PRE TO POST CHANGES IN SCORES ON BELL SCHOOL ADJUSTMENT INVENTORY
Pendleton County High School

Grade	Gain in Score No.	Gain in Score %	Loss in Score No.	Loss in Score %	Same Score No.	Same Score %	Total
9	59	48.7	18	14.8	44	36.5	121
10	20	17.9	27	24.1	65	58.0	112
11	16	25.4	13	20.6	34	54.0	63
12	7	10.1	30	43.5	32	46.4	69
Total	102	27.9	88	24.1	175	20.9	365

Table 3 shows that 88 students (24.1%) scored lower on the post administration of the inventory, evidencing an improvement in attitude toward the school. Likewise, 175 (20.9%) students showed no change, or no deterioration in attitude. Of the 102 (27.9%) of the students showing a gain in scores (and evidencing a poorer attitude) perhaps the following will be elaborative:

Change from:

Excellent to Good*	7 students
Excellent to Average	2 students
Good to Average	28 students
Good to Unsatisfactory	4 students
Good to Very Unsatisfactory	1 student
Average to Unsatisfactory	26 students
Average to Very Unsatisfactory	19 students
Unsatisfactory to Very Unsatisfactory	15 students

*Five categories of norms are presented in the Manual--Excellent, Good, Average, Unsatisfactory, Very Unsatisfactory.

From the above information one must deduce that the general trend in this school was toward a better student attitude. Of the 365 students tested, 263 (72.1%) either improved their attitude or, at least showed no deterioration. In the group of 102 whose attitudes are assumed to be poorer, most of the deterioration came in those students who already--at pre-testing--had only average or below attitude scores.

Objective 1.03

(Students will achieve at their expected levels, as measured by standardized testing, even though their teachers are being engaged in in-service education.)

Technical assistance for determining the state of attainment of this objective was obtained from Dr. Ivan Russell, Professor of Education and Associate Dean of the Graduate School, Southern Illinois University. Russell's study was conducted with the two elementary laboratory schools because the laboratory school faculties were engaged in a higher intensity of in-service education activities and, thus, there was a greater potential for disrupting the normal learning routines of pupils.

The Russell study is too detailed and lengthy to be included in the body of this report; however, it is reprinted in toto as Appendix B. The principal conclusion that emerges from the study is that these pupils did indeed achieve at their expected levels even though, or perhaps because, their teachers were engaged in intensified in-service education as members of the laboratory schools of this project.

Objective 1.04

(Teachers will learn to develop new instructional patterns as determined by the actual implementation of programs characterized by these new patterns.)

The development of new instructional patterns is a difficult long-range objective and, therefore, the data reported herein are related to the three years of the project rather than reporting only those patterns which were developed during the one year covered by most of this evaluation report.

The three laboratory schools did indeed develop exemplary new instructional patterns. Third District Elementary School developed the following patterns:

1. Team teaching involving all teachers and all pupils.
2. Individualized study organization which employed teacher-developed learning packets, individual audio learning stations, and individual learning rooms.
3. Cross-grade grouping for mathematics and language arts instruction.
4. Reorganized physical education program based on "Body Management" procedures.

The Caywood Elementary School developed a non-graded, team-teaching program which attracted visitors from throughout the region and beyond. A Region IV-A newsletter, May, 1970 (see Appendix C) publicized this program throughout the state.

The Pendleton County High School developed the second computerized flexibly scheduled secondary school program in Kentucky and, thereby, became the model for the diffusion of this innovation for the state.

Appendix D, a Region IV-A newsletter, December, 1969, explains the major details of this organizational pattern. The 1970-71 school year resulted in further refinement and improvements. Computer scheduling is now done by the Computing Center, University of Kentucky, a "Tutorial Resource Center" in vocational education was added, and the faculty is in the process of transforming the school into a "continuous progress" program.

Many other schools of the region have made organizational changes, partially as a consequence of the project. Table 4 shows the current organizational patterns of most elementary schools in the region. (Note that the typical pattern is still the graded, self-contained classrom; however, also note that there are many exceptions to this pattern.)

TABLE 4--REGIONAL SUMMARY OF THE TYPES OF SCHOOL ORGANIZATION BY NUMBER OF ELEMENTARY SCHOOLS IN EACH TYPE DISTRICT*

Type of Organization for at Least One School or Grade Level in Designated District	Urban		Suburban									Rural										Total School			Total Dist.		
	Ludlow	Newport	Beechwood	Bellevue	Boone Co.	Campbell Co.	Erlanger	Ft. Thomas	Kenton Co.	Southgate	Carroll Co.	Gallatin Co.	Grant Co.	Owen Co.	Pendleton Co.	Silver Grove	Trimble Co.	Walton-Verona	Williamstown	Total Urban	Total Suburban	Total Rural	Urban	Suburban	Rural
Totally Non-graded		1				1			2					1						1	3	1	1	2	1
Partially Non-graded						4	1	1	2											0	8	0		4	
Totally Graded in Self-Contained Classes	1	2	1	1	4	4	2	2	7	1	1	1	6		5	1	1	1	1	3	22	17	2	8	8
Cross-grade Grouping				1	2	2	1	3	4		1		1	1	3		3			0	13	9		6	5
Departmentalized in Grades 3, 4, 5, & 6					2	2														0	4	0		2	
Grades 4, 5 & 6	1																			1	0	0	1		
Grades 4, 5, 6, 7 & 8				2																0	2	0		1	
Grades 5 & 6																	1			0	0	2			1
Grades 5, 6, 7 & 8															3	1				0	0	3			2
Grades 7 & 8										1							1			0	1	1		1	1
Level not reported							1	3	3				2						1	0	7	3		3	2
Other Organizational Characteristics Team Teaching	1																			1	0	0	2		
Team Teaching Continuous						1			1											0	2	0			
Special Grouping in Grade 1						1														0	0	1		1	
Grouping Low-Achievers (6, 7 & 8)				1		1														0	2	0		2	
Contract Teaching--Individualized						1																			

*Some schools reported multiple types of organizational patterns.

Table 5 shows the organizational patterns of a major sampling of secondary schools in the region. (Note that while most schools still hold to the traditional fifty-five minute period schedule, there are exceptions to and modifications of this pattern.)

TABLE 5--ORGANIZATIONAL PATTERNS OF SECONDARY SCHOOLS - BY DISTRICT

Type and Name of Districts	Type of Organization				
	Fifty-five Minute Periods	Modular Schedule	Team Teaching	Independent Study	Jr. High Exploratory
URBAN					
Ludlow	1				
Newport	1		1	1	
SUBURBAN					
Beechwood	1				
Bellevue	1	1 (Block)			
Boone County	4		1		2
Campbell County	2		1		
Erlanger	1				
Ft. Thomas	1		1	1	
Kenton County	4		4		
Southgate	1				
RURAL					
Carroll County	1		1	1	
Gallatin County	1				
Grant	1		1		
Owen County	1		1		
Pendleton County		1	1	1	
Silver Grove	1				
Trimble County	2		1	1	
Walton-Verona	1				
Williamstown	1				
Total number of Schools Reporting	26	2	13	5	2

Beyond any doubt, the Title III project was a major influence in helping the teachers and schools of this region develop new instructional and organizational patterns.

Objective 1.05

(Teachers will evidence a more positive regard for continuous pupil progress in school as determined by decreased retention rates.)

A close examination of pupil retention (pupil repeaters in a given grade) rates was maintained throughout the three years of the project. It was assumed that retention rates are rather sensitive indices of teachers' attitudes toward instruction and learners; therefore, any marked changes in teacher growth would be reflected in congruent changes in retention rates. Accordingly, Curtis Foutch was assigned the task of conducting a major study of retention rates. Foutch's study, completed with assistance from the University of Cincinnati, covered a number of years to provide a rather comprehensive picture of retention in the region through the 1969-70 school year and related pupil retention to teacher involvement in project sponsored in-service education activities. His summary of this study is attached to this report as Appendix E. Two conclusions have significant meaning for this report:*

5. The level of in-service involvement did not greatly affect the change in retention rate of 1969 over 1968, except at the satellite school level.

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*William Curtis Foutch, "A Comparative Analysis of In-Service Programs in Northern Kentucky in Relation to Promotional Practices for Pupils," (unpublished Ed.D. dissertation, University of Cincinnati, 1971) p. 277.

However, when the data were broken down into elementary, secondary, urban, suburban, and rural categories for further analysis, some changes in retention rates were found to be significant.

6. The level of in-service involvement did affect the change in retention rate of 1969 over the mean retention rate for the pre-project period (1964-68).

Pupil retention data for the region during the project period, 1968-69 to 1970-71, are presented in Table 6. Note that only in grades 1, 11, and 12 did the retention rate increase, while when all grades are considered the regional rate decreased from 5.00 percent at the beginning of the project to 3.99 percent at the end of the project.

TABLE 6--TOTAL REGION RETENTION PROFILE FOR THE PROJECT PERIOD

Grade	1967-68 Total	1967-68 Number Retained	1967-68 Percentage Retained	1970-71 Total	1970-71 Number Retained	1970-71 Percentage Retained
1	6,992	777	11.11	7,102	805	11.33
2	6,334	328	5.18	6,325	261	4.12
3	6,231	226	3.63	6,256	121	1.93
4	6,168	213	3.45	6,601	121	1.83
5	6,092	168	2.76	6,413	96	1.49
6	6,054	94	1.55	6,439	91	1.41
Total Elem.	37,871	1,806	4.77	39,136	1,495	3.82
7	5,771	346	6.00	6,430	273	4.24
8	5.627	335	5.95	6,393	238	3.72
9	5,390	367	6.81	5,930	295	4.97
10	4,865	290	5.96	5,207	282	5.41
11	4,370	163	3.73	4,705	194	4.12
12	3,789	83	2.19	4,169	96	2.30
Total Second.	29,812	1,584	5.31	32,834	1,378	4.19
Total Region	67,683	3,390	5.00	71,970	2,873	3.99

Table 7 shows the retention rate comparisons for the project's laboratory schools for the entire project period of three years. Note that only in grade 6 was there an increased rate.

TABLE 7--PUPIL RETENTION PROFILES FOR LABORATORY SCHOOLS FOR THE PROJECT PERIOD

Grade	1967-68			1970-71		
	Total	Number Retained	Percentage Retained	Total	Number Retained	Percentage Retained
1	243	36	14.81	351	29	8.26
2	224	16	7.14	170	2	1.17
3	209	10	4.78	172	0	0
4	182	10	5.49	180	9	5.00
5	182	8	4.40	154	3	1.94
6	183	1	.55	166	5	3.01
Total Elem.	1,223	81	6.62	1,193	48	4.02
7						
8						
9	138	0	0	178	0	0
10	146	2	1.37	155	0	0
11	142	1	.70	149	0	0
12	122	2	1.63	126	0	0
Total Second.	548	5	.91	620	0	0
Total Region	1,771	86	4.85	1,813	48	2.64

Table 8 presents the retention rate profiles for the satellite schools during the project period. Note that except for grades 2, 6, 7, and 8 there was an appreciable decline in retention rates among these schools.

TABLE 8--PUPIL RETENTION PROFILES FOR SATELLITE SCHOOLS FOR THE PROJECT PERIOD

Grade	1967-68 Total	1967-68 Number Retained	1967-68 Percentage Retained	1970-71 Total	1970-71 Number Retained	1970-71 Percentage Retained
1	791	58	7.33	644	41	6.36
2	721	39	5.41	616	37	6.00
3	709	17	2.40	551	8	1.45
4	735	29	3.95	591	6	1.01
5	717	23	3.21	566	4	.70
6	739	10	1.35	602	12	1.99
Total Elem.	4,412	176	3.99	3,570	108	3.02
7	359	8	2.23	163	4	2.45
8	381	3	.79	176	3	1.70
9	292	26	8.90	399	20	5.01
10	248	27	10.89	343	13	3.79
11	237	8	3.38	288	6	2.08
12	194	0	0	297	0	0
Total Second.	1,711	72	4.21	1,666	46	2.76
Total Region	6,123	248	4.05	5,236	154	2.94

Table 9 shows the pupil retention profiles for the peripheral schools for the project period.

TABLE 9--PUPIL RETENTION PROFILES FOR PERIPHERAL SCHOOLS FOR THE PROJECT PERIOD

Grade	1967-68 Total	1967-68 Number Retained	1967-68 Percentage Retained	1970-71 Total	1970-71 Number Retained	1970-71 Percentage Retained
1	5,958	683	11.46	6,107	735	12.03
2	5,389	273	5.06	5,539	222	4.00
3	5,313	199	3.75	5,533	113	2.04
4	5,215	174	3.33	5,830	106	1.81
5	5,193	137	2.64	5,693	89	1.56
6	5,049	83	1.64	5,671	74	1.30
Total Elem.	32,236	1,549	4.81	34,373	1,339	3.89
7	5,412	338	6.25	6,175	260	4.21
8	5,246	332	6.33	5,961	233	3.90
9	4,960	341	6.88	5,353	275	5.13
10	4,471	261	5.84	4,709	269	5.71
11	3,991	154	3.86	4,268	188	4.40
12	3,473	81	2.33	3,746	96	2.56
Total Second.	27,553	1,507	5.47	30,212	1,321	4.37
Total Region	59,789	3.056	5.11	64,585	2,660	4.11

Table 10 summarizes the retention rate profiles for the region by type of school classification and for each year of the project. The rate of decline appears to be related directly and positively to the degree of teacher involvement in project-sponsored activities; that is, the laboratory schools, in which the greatest intensity of project activity occurred, experienced the greatest decrease (-2.60 percent for the elementary, and -0.91--all possible--for the secondary). Likewise, the satellite schools experienced a larger decrease (-0.98 percent elementary and -1.45 percent secondary) than did the peripheral schools which had less intense in-service activity.

The conclusion must be drawn that the teachers in this region did indeed evidence a higher regard for continuous pupil progress in school by altering their pupil promotion practices.

TABLE 10--REGIONAL RETENTION RATE PROFILES BY TYPE OF SCHOOL

Type of School	Grades 1 - 6 Percentage of Retention 1967-68	1968-69	1969-70	1970-71	3 yr. change
Laboratory	6.62	5.57	4.51	4.02	-2.60
Satellite	3.99	2.96	4.60	3.01	-0.98
Peripheral	4.81	4.93	3.97	3.89	-0.92
Total Region	4.77	4.71	3.92	3.82	-0.95
	Grades 7 - 12				
Laboratory	0.91	0.00	0.80	0.00	-0.91
Satellite	4.21	3.81	5.99	2.76	-1.45
Peripheral	5.47	5.21	4.32	4.37	-1.10
Total Region	5.32	5.03	4.30	4.19	-1.12

Objective 2.01

(The principals and their supervisors of the satellite and laboratory schools will respond positively to monthly leadership seminars as determined by an evaluation form developed for this purpose.)

The project proposal stated: "As evidenced by the changed role assigned the satellite schools, the project is concerned significantly with the expansion and strengthening of model programs in the region . . . . Consequently, the principals of the laboratory schools and their counterparts from satellite or other schools which have moved to design an innovation strategy will be involved along with their supervisors in a continuing series . . . of diffusion seminars which will focus on the leadership dimension of initiating and developing /innovative programs/."

Eight of these leadership seminars were held on a monthly basis (the February seminar was cancelled). At the conclusion of each seminar a simple response form was completed by each participant to provide, in a general way, some feedback about the relevancy and adequacy of the seminar. Table 11 displays these response data. Perhaps the significance of these data can be summarized thusly:

1. The seminars increased the awareness of problems emerging from innovation diffusion.
2. The seminars were relevant.
3. The seminars were helpful as determined by either "excellent" or "good" ratings by the participants.

Therefore, it would appear that Objective 2.01 was indeed attained.

TABLE 11--EVALUATION SUMMARY, PRINCIPALS' AND SUPERVISORS' SEMINARS

Evaluation Item	Response Frequency									
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
It convinced me that we need to plan for future faculty sessions	10	11	5	9	2	NO MEETING	7	5	3	52
It increased my awareness of emerging problems	12	15	11	10	10		19	11	8	96
It was interesting but didn't really concern me	0	0	1	1	0		0	0	1	3
It was excellent	7	14	8	15	11		7	6	10	78
It was good	10	6	9	5	4		12	5	6	57
It was poor	0	0	0	0	0		0	0	0	0
TOTAL NUMBER OF PARTICIPANTS	17	20	17	21	15		22	14	17	143

Objective 2.02

(The teachers of this region will respond positively to project sponsored in-service activities and materials as evidenced by monitoring reports.)

Work Clinics

Two work clinics were held on a voluntary attendance basis for educational personnel of this region. The first was held January 11, 1971 and dealt with "individualized reading instruction." The second, April 29, 1971, dealt with "motivation and skill development through independent study and individualized instruction." At the conclusion of each clinic the participants were asked to evaluate the adequacy of the clinic and to provide some perspective on the impact of the experience. Table 12 summarizes the respondents' evaluation of these two clinics.

TABLE 12--PARTICIPANT EVALUATION OF THE TWO VOLUNTARY CLINICS

	Clinic I		Clinic II	
	No.	%N*	No.	%N**
It was excellent	121	41.7	81	40.5
It was good	167	57.6	95	47.5
It was poor	2	.7	17	8.5
I plan to explore the topic further	187	64.5	135	67.5
I plan to try to use this information in my own classroom	134	46.2	97	48.5

*N = 290 (247 teachers, 29 principals, 9 supervisors, 5 others)
**N = 200 (160 teachers, 24 principals, 8 supervisors, 8 others)

Video Taping Program

The use of up-to-date video tapes in diffusing innovative ideas received renewed emphasis during the 1970-71 project year. There were 31 separate taped presentations made, reaching an audience of 1,255 teachers. (The project produced 24 video tapes.) After each presentation each viewer was asked to evaluate the adequacy of the tape and these responses were then summarized for a "consensus" evaluation. Table 13 shows the tapes presented, the school districts in which presentations were made, the numbers of viewers, and their consensus evaluation. Obviously, the presentations received a positive reaction from the viewers.

TABLE 13--VIDEO TAPE PROGRAM EVALUATION

District	Tape Viewed	No. People Viewing Tape	Was Subj. Adequately Covered?		Was Content Applic. to Your Situation?		Did Tape Answer Your Questions?		Did Tape Stimulate Interest to Explore Further?	
			Yes	No	Yes	No	Yes	No	Yes	No
Kenton Co.	Team Teaching	23	X		X		X		X	
Kenton Co.	Team Teaching	23	X		X		X		X	
Pendleton Co.	Flexible Scheduling	35	X		X		X		X	
Pendleton Co.	Independent Study	4	X		X				X	
Owen Co.	Team Teaching	36	X		X		X		X	
Ft. Thomas	Independent Study	130	X		X		X		X	
Williamstown	Flexible Scheduling	20	X		X				X	
Williamstown	Team Teaching	20	X		X				X	
Williamstown	Art Program	5	X		X				X	
Grant Co.	Flexible Scheduling	40	X		X		X		X	
Covington Diocese	Micro-Teaching	20	X		X		X		X	
Ft. Thomas	H. S. Drama	30	X		X				X	
N.K.S.C.	Micro-Teaching	35	X		X		X		X	
Covington Diocese	Independent Study	50	X		X		X		X	
Ft. Thomas	H. S. Drama	400	X		X		X		X	
Ft. Thomas	H. S. Drama	75	X		X		X		X	
Walton-Verona	Owen Co. Elementary	14	X		X		X		X	
Walton-Verona	Use of Multi-Media	14	X			X	X			X
Xavier Univ.	Flexible Scheduling	35	X		X		X		X	
Xavier Univ.	Computer Ass't. Inst	35	X		X		X		X	
Xavier Univ.	Micro-Teaching	35	X		X		X		X	
Xavier Univ.	Independent Study	35	X		X		X		X	
Pendleton Co.	Cold Spring Elem.	75	X		X		X		X	
Pendleton Co.	Non-graded Prog.	75	X		X		X		X	
Pendleton Co.	Team Teaching	75	X		X		X		X	
Thomas More Col.	Independent Study	9	X		X		X		X	
Thomas More Col.	Flexible Scheduling	9	X		X		X		X	
Campbell Co.	Micro-Teaching	35	X		X		X		X	
Cov. Diocese	Student Workshop	125	X				X		X	
U. C.	Cold Spring Prog.	24	X		X		X		X	
Totals		1255	31	0	29	1	26	0	30	1

Newsletters

During the 1970-71 project year, six newsletters were published and distributed throughout the region. Though there was no formalized procedure for evaluating the content or impact of these newsletters, the project staff received a constant input of very favorable comment concerning them.

Summary

The evaluation responses concerning the work clinics, video tape presentations, and the newsletters would verify that the teachers in this region did indeed respond positively to them, thus indicating the attainment of Objective 2.02.

Objective 3.01

(The laboratory schools will develop exemplary demonstration programs as evidenced by monitoring reports and regional visitation.)

The three laboratory schools were used primarily during the first two years of the project as learning centers for in-service education, and, therefore, the development of "model" school programs was only an incidental concern. The final project year, however, was devoted to refining and developing new programs and to demonstrating these to other schools in the region. (Appendices C and D describe two of these new programs.)

During this demonstration year, 24 video tapes were made of the exemplary programs in these laboratory schools and presented widely in the region. In addition, personnel in the region were encouraged to visit the three schools for on-site observation. The following such on-site visitations were made:

Pendleton County High School-----314 persons
Caywood Elementary School--------143 persons
Third District Elementary School-102 persons

The proliferation of laboratory school developed programs in the region cannot be documented fully because many of these programs were not replicated in toto, but merely served as idea bases for the development of different programs. Too, the project did not attempt to establish a cause-effect relationship between the demonstration model and the implantation elsewhere. There is reason to believe, however, that some cause-effect relationship did occur. For instance, the modular scheduling program at Pendleton County High School certainly had direct influence in the initiation of a similar program at the

Carroll County High School (and two other schools outside the region). Likewise, the team teaching model at the Caywood Elementary School undoubtedly served as the model for many other budding programs in the region.

It is a safe conclusion that this objective (3.01) was attained in accordance with the resource and time constraints prevalent in this region and to this project.

Objective 3.02

(The school districts of this region will take advantage of the teacher visitation program as evidenced by reports of their participation.)

A controlled teacher visitation program was conducted during the final year of this project to disseminate and diffuse innovative ideas. Table 14 shows the extent of this visitation and the evaluation of the teacher visits in terms of "helpfulness."

TABLE 14--VISITATION PROGRAM EVALUATION

District	Personnel Visiting	Evaluation							
		Very Helpful		Some Help		Little Help		No Help	
		No.	%	No.	%	No.	%	No.	%
Boone County	16	12	75.0	4	25.0	0	0.0	0	0.0
Campbell County	30	20	66.7	8	26.7	0	0.0	0	0.0
Dayton	6	6	100.0	0	0.0	0	0.0	0	0.0
Ft. Thomas	43	31	72.1	12	27.9	0	0.0	0	0.0
Southgate	4	2	50.0	0	0.0	0	0.0	0	0.0
Carroll County	7	6	85.7	1	14.3	0	0.0	0	0.0
Grant County	23	15	65.2	8	34.8	0	0.0	0	0.0
Williamstown	7	5	71.4	1	14.3	1	14.3	0	0.0
Kenton County	73	54	74.1	13	17.8	1	1.4	0	0.0
Beechwood	5	1	20.0	1	20.0	0	0.0	0	0.0
Covington	4	1	25.0	3	75.0	0	0.0	0	0.0
Erlanger	28	19	67.9	7	25.0	1	3.6	0	0.0
Ludlow	18	5	27.8	8	44.4	5	27.8	0	0.0
Pendleton County	30	26	86.7	0	0.0	0	0.0	0	0.0
Trimble County	4	2	50.0	1	25.0	1	25.0	0	0.0
Covington Diocese	109	69	63.3	31	28.4	9	8.3	0	0.0
Totals	407	274	67.3	98	24.1	18	4.4	0	0.0

It is obvious from Table 14 that the visitation program was perceived as being quite helpful. In fact, it would seem to be quite phenomenal that 67.3 percent of the 407 teachers saw the visit as "Very Helpful." On the other hand, only 16 of the 23 districts took advantage of the visitation opportunity. Perhaps a safe conclusion might be drawn that Objective 3.02 was partially attained.

Objective 4.01

(Superintendents will demonstrate a desire to cooperate in sharing ideas for regional school improvement as evidenced by attendance and participation in meetings of the Board of Directors.)

Ten monthly meetings of the Board of Directors were held during the final year of this project. The dates of these meetings and the attendance figures follow:

August, 1970 -- 18 persons from 14 districts
September 1970 -- 13 persons from 12 districts
October, 1970 -- 14 persons from 14 districts
November, 1970 -- 21 persons from 12 districts
December, 1970 -- 17 persons from 10 districts
January, 1971 -- 8 persons from 6 districts
February, 1971 -- 15 persons from 8 districts
March, 1971 -- 10 persons from 6 districts
April, 1971 -- 8 persons from 5 districts
May, 1971 -- 8 persons from 8 districts

Obviously, the attendance and representation in these meetings of the Board of Directors were not complete. Two reasons may account for this: (1) the Board meetings were restricted too much to routine business, and (2) the superintendents were too busy with other administrative tasks to attend. The conclusion should not be drawn, however, that the absent superintendents were not interested in the project. The conclusion can be drawn that future meetings of the Board of Directors of the new three-year regional project should (1) meet for purely business matters on a less frequent basis (perhaps with a small executive committee designated to meet monthly), and (2) the full-attendance meetings should be devoted to broad policy-making and project-monitoring affairs.

Objective 4.02

(Superintendents will demonstrate their concern for regional involvement by providing leadership for the inclusion of lay citizens in program development as evidenced by their participation in a related Title V, 503 project.)

The superintendents of this region agreed to help organize and serve as secretaries to district school study committees composed of lay citizens. Nineteen of the twenty-three districts had active study committees which functioned under a Title V, 503 grant. This related project served to assist lay citizens in studying their schools and making recommendations related to program change priorities. A prime purpose of this project was to generate ideas for the new three-year Title III regional project.

The superintendents did provide the leadership to accomplish the objectives of the Title V, 503 project, which were:

1) Obtain broad-based lay citizen involvement in studying current data on educational needs, availability of school resources, and constraints inhibiting improvements in the schools of the region.
2) Obtain informed lay citizen judgments in the assignment of program priorities for further planning in improving the quality of schools in the region.
3) Analyze, synthesize, and composite the outputs sought in Objective 2 into program planning priority profiles descriptive of each school and school district, each of the sub-regions (Urban, Suburban, Rural), and for the region as a whole.

Objective 1 has been achieved beyond any reasonable doubt. Over 1,000 citizens in 20 of the 22 school districts participated in an extended study of their schools. (Actually, over 1,500 citizens were involved, though about 500 participated for only a short period of time.) Study packets, which outlined and specified the tasks each school and district study committee followed, were developed specifically for this project.

Objective 2 was attained as a consequence of achieving the participation called for in meeting Objective 1. In all instances, the school and district study committees, after gathering and analyzing information, made value judgments concerning program planning priorities.

Objective 3 was attained by synthesizing the program planning priorities and reporting these profiles to the region.

The attainment of these three objectives has already had an effect upon educational programming in this region. For example, the data produced by this study and the programming judgments made therefrom have been utilized in developing a new three-year program cycle for Region IV-A, Title III. Likewise, many schools and districts have already begun to plan for and implement some of the program changes suggested by the lay citizens.

It should be noted that the Title III project provided the organizational structure and the means for achieving the Title V project goals. The same superintendents served as members of the boards of directors for the two projects, and the Title III staff provided the manpower and leadership to effect the Title V project.

The outstanding success achieved by the Title V project was due largely because of the administrative leadership in this region. Beyond any reasonable doubt, Objective 4.02 was attained to a remarkable extent.

SECTION B. EFFECTIVENESS OF THE PROJECT AS A DEMONSTRATION

The Northern Kentucky In-Service Innovation Center (Region IV-A, Title III) is not being continued per se. The three years of the project were adequate for developing the procedures for providing in-service teacher education in tandem with the promotion of school programming change. The procedure of using schools as in-service learning laboratories with the working attachment of "satellite" school faculties has proved to be an effective way of developing and diffusing school program innovation in a region. Therefore, the central intent of the project has been achieved and, as school districts begin to emulate this procedure using their own resources, except as a "service" there is no valid reason to continue the Center, with or without Federal funding.

As this report is being written a new Title III project has been initiated to capitalize upon the insights gained during the past three years. Using the same organizational structure and many of the same in-service procedures, the new project seeks to mount a region-wide effort to incorporate "diagnostic instruction" as a major instructional strategy in the schools of Northern Kentucky.

It is impossible to provide an accurate picture of the effectiveness of this project as a demonstration. Needless to say, diffusion in the region has been widespread and, for the time frame, adequate. Visits and inquiries from outside the region have been numerous and evidenced considerable interest. The laboratory schools, particularly, have been deluged with visitors seeking knowledge about flexible modular scheduling, asking questions about team teaching, inquiring about in-service

education processes. One laboratory school, Pendleton County High School, and a satellite school, Owen County Elementary School, each won the 1971 Governor's State Runner-Up Award for Outstanding Educational Innovation.

APPENDIX A

ADDENDUM

Restatement of Project Objectives

June, 1970

ADDENDUM

Region IV-A

2. Objectives

In terms of the Region's assignment of need priority, the central thrust of this project has been and will continue to be to develop, implement and test innovative in-service education processes designed to increase the professional competence of personnel in the region so that concomitant changes occur in curricula, instructional methods and auxiliary services to individual pupils. The project's objectives have been concerned with obtaining the optimum level of staff participation in program change processes in real "school laboratories." Three levels of participation have been programmed and translated into objectives. Restatement of these objectives in terms of the third year of operation are as follows:

I. To develop ways of speeding up the processes whereby school staffs not only learn how to, but also actually complete the task of: (1) analyzing their pupil needs, curricula and instructional procedures; (2) developing designs and strategies for changing these three areas and (3) testing these changes in the schools themselves. To accomplish this major objective, more specific objectives are: To refine and intensify the development of the three laboratory schools being used as learning laboratories.

Rationale 1) Third District Elementary School in Covington, the Urban Laboratory School, through analysis discovered that these children needed a more enthusiastic environment for learning. The school will concentrate on the development of more creative instructional methods and materials in all areas of the curriculum.

Product (a) Teachers will demonstrate more enthusiasm as measured by a teacher attitude inventory.

(b) Students will demonstrate more enthusiasm for learning as measured by a student attitude inventory.

Rationale 2) At Caywood School in Kenton County, the Suburban Laboratory School, a wide range of abilities was discovered which was not being met by the existing program. It was decided that this school should move toward a continuous progress or non-graded program using a team teaching approach.

Product (a) Teachers will develop a team teaching approach for instruction. The monitoring system will provide measurement information.

(b) Students will achieve to their expected level as measured by a comparison of I.Q. and achievement scores.

Rationale 3) At Pendleton High School, the Rural Laboratory School, the students generally were trying to do what was expected of them by their parents and teachers. There was not much enthusiasm because they were working for someone other than themselves. A computerized flexible modular schedule was instituted as a method to have students assume more responsibility and create more enthusiasm for their own learning.

Product (a) Students will respond positively toward the school organization as measured by the Bell School Adjustment Inventory.

(b) Students will respond positively toward the school organization as observed by -

1) Student comments

2) Improved attendance

3) Improved discipline

Process In order to achieve the above Product objectives, the Northern Kentucky In-Service Innovation Center will provide each school staff:

(1) twenty-five in-service meetings

(2) teacher visitation

(3) consultant services

(4) video taped programs

(5) $300 for professional materials

(6) $1,500 for instructional materials

b) To devise ways of working with staffs within the satellite schools attached to each laboratory school.

c) To develop means for securing innovations implantation among both the satellite and peripheral schools within the region.

II. To expand the concept of the laboratory schools as demonstration centers to the satellite schools.

Product The defined satellite schools will develop the same concept as the laboratory schools. This will be measured by observation of the coordinator of laboratory school experimentation.

Process The Northern Kentucky In-Service Innovation Center will provide:

(1) twelve in-service meetings

(2) teacher visitation

(3) consultant services

(4) video taped programs

(5) eleven seminars

III. Product-Process To provide schools with information so that they might become involved in the concept of self-improvement through analysis of current status, design of new programs and the testing-evaluation of the new programs. Measured by:

(1) teacher visitation

(2) consultant use

(3) clinic work sessions

(4) video tape usage

IV. To extend the level of cooperation among the twenty-two public and one parochial school districts in the region so that there are developed appropriate ways of sharing services and costs of maintaining effective school programs.

Measured by the existence of an approved plan for sharing services and costs of school program at the end of the school year.

Process (1) The continuation of using the same board of directors for Title V and Title III.

(2) Regular meetings between the twenty-two public and one parochial school districts. These aspects will be measured by a regular monitor report.

EVALUATION DESIGN

I. To develop ways of speeding up the processes whereby school staffs not only learn how to, but also actually complete the task of: (1) analyzing their pupil needs, curricula and instruction procedures; (2) developing designs and strategies for changing these three areas and (3) testing these changes in the schools themselves. To accomplish this major objective, more specific objectives are;

a) To refine and intensify the development of the three laboratory schools being used as learning laboratories.

THIRD DISTRICT LABORATORY SCHOOL

Data will be obtained to show how teachers will demonstrate more enthusiasm as measured by a teacher attitude inventory. The data will be obtained in the fall and again in the spring for purposes of comparison. The '71 spring data will also be compared to the 1968-69 base data. The criteria which will be used to indicate growth of teacher enthusiasm will consist of higher scores obtained by the teachers on the attitude inventory.

Data will be obtained to demonstrate more student enthusiasm for learning as measured by the Bell School Adjustment Inventory. The data will be gathered in the fall and again in the spring for purposes of comparison. The criteria which will be used to indicate more student enthusiasm for learning will consist of higher scores obtained by the students on the spring administration of the Bell School Adjustment Inventory.

CAYWOOD LABORATORY SCHOOL

Data will be obtained to show the development of a team teaching approach for instruction by the school's faculty members. The data will be obtained by observation of the intensity of team teaching programs occurring in the fall and the intensity of teacher involvement in team teaching programs in the spring. The criteria which will be used to indicate growth in team teaching will be the intensity of involvement in the fall as compared with the intensity of involvement in the spring.

Data will be obtained to demonstrate that students will achieve at their expected level as measured by a comparison of I.Q. and achievement scores. The Stanford Achievement Test Battery will be used to obtain achievement scores. The California Test of Mental Maturity will be used to obtain I.Q. scores.

The test data will be obtained in the spring. The criteria will be that the students would achieve at their expected levels.

PENDLETON LABORATORY SCHOOL

Data will be obtained to demonstrate that students will respond positively toward the school organization as measured by the Bell School Adjustment Inventory. The data will be obtained in the fall and again in the spring for purposes of comparison. The criteria which will be used to indicate a more positive response toward the school organization will consist of higher scores obtained by the students on the spring administration of the Bell School Adjustment Inventory.

Data will be obtained to show that students will respond positively toward school organization as observed by student comments, improved attendance and improved discipline. Student comments will be obtained throughout the school year. The attendance data will be obtained in the spring of 1971. The 1971 attendance data will be compared with the 1970 attendance data. The discipline data will be obtained for the 1971 school year and for the 1970 school year. The criteria which will be used to indicate a more positive response toward the school organization will consist of reduced rates of student absences and number of referred discipline cases.

II. To expand the concept of the laboratory schools as demonstration centers to the satellite schools.

Data will be obtained to demonstrate the expansion of the concept of the laboratory schools as demonstration centers to the satellite schools. Data concerning this will be obtained from monthly monitoring reports.

III. To provide schools with information so that they might become involved in the concept of self-improvement through analysis of current status, design of new programs and the testing-evaluation of the new programs.

Data will be obtained to demonstrate that schools will be provided with information so that they might become involved in the concept of self-improvement. Data concerning this will be obtained from monthly monitoring reports.

IV. To extend the level of cooperation among the twenty-two public and one parochial school districts in the region so that there are developed appropriate ways of sharing services and costs of maintaining effective school programs.

Data concerning this objective will be obtained from monthly monitoring reports.

MONITORING

Various activities and tasks have been specified in order to attain process objectives. Information regarding the completion or non-completion of these activities and tasks is necessary in order to have evidence regarding reasons for attainment or non-attainment of process objectives. Activities and tasks to be monitored will include:

a. In-service meetings
b. Teacher visitation
c. Consultant services
d. Video taped programs
e. Seminars
f. Clinic work sessions
g. Instructional and professional materials

These activities and tasks will be monitored by utilizing the following form. Monthly summary reports will be collected regarding the process objectives.

MONITORING CHART

DATE	ACTIVITY/TASK	RELATED TO OBJECTIVE	ATTAINED	IF NOT - WHY

CALENDAR OF EVENTS

Expected Date	Activities, Materials, and Facilities	Persons Responsible	Completion Date
July	Final selection of lab-satellite schools	William W. Cann	
--	Pendleton County In-Service Workshop	Dorothy Caldwell	
July 23	Board Meeting	Edward E. Ball	
--	Principals' Seminar	Staff	
August 10-21	Caywood Laboratory Workshop	William W. Cann	
August 10-14	Pendleton Laboratory Workshop	William W. Cann	
August 10-14	Cold Spring Satellite Workshop	William W. Cann	
August 20	Board Meeting	Edward E. Ball	
August 24-28	Third District Laboratory Workshop	William W. Cann	
August 24-28	Ruth Moyer Satellite Workshop	William W. Cann	
--	District In-Service Meeting	Dorothy Caldwell	
August 31	Ludlow In-Service Meeting	William C. Voelker	
--	Principals' Seminar	Staff	
September	District In-Service Meetings	Dorothy Caldwell	
--	Lab School Evaluation Data	William C. Foutch	
September 17	Board Meeting	Edward E. Ball	
Sept. 21 & 28	Caywood Lab Sessions	William W. Cann	
Sept. 22 & 29	Third District Lab Sessions	William W. Cann	
Sept. 23 & 30	Pendleton Lab Sessions	William W. Cann	
--	Video taping Activities	William C. Voelker	
--	Principals' Seminar	Staff	
--	Check Monitoring Reports	William C. Foutch	
October	District In-Service Meetings	Dorothy Caldwell	
--	Lab School Evaluation Data	William C. Foutch	
October 15 & 19	Caywood Lab School Sessions	William W. Cann	
October 6,13 & 20	Third District Lab School Sessions	William W. Cann	
October 7,14 & 21	Pendleton Lab School Sessions	William W. Cann	
October 22	Board Meeting	Edward E. Ball	
--	Principals' Seminar	Staff	

Calendar of Events - Continued

October - continued		
—	Clinic Work Session	Dorothy Caldwell
	Video Taping Activities	William C. Voelker
	Check Monitoring Reports	William C. Foutch
November	District In-Service Meetings	Dorothy Caldwell
Nov. 9 & 23	Caywood Lab Sessions	William W. Cann
Nov. 10 & 24	Third District Lab Session	William W. Cann
Nov. 11 & 25	Pendleton Lab Session	William W. Cann
Nov. 19	Board Meeting	Edward E. Ball
	Principals' Seminar	Staff
	Video Taping Activities	William C. Voelker
	Check Monitoring Reports & Evaluation Data	William C. Foutch
	Clinic Work Session	Dorothy Caldwell
December	District In-Service Meetings	Dorothy Caldwell
December 7	Caywood Lab Session	William W. Cann
December 2 & 8	Third District Lab Sessions	William W. Cann
December 3 & 9	Pendleton Lab Sessions	William W. Cann
December 17	Board Meeting	Edward E. Ball
December	Principals' Seminar	Staff
December	Video Taping Activities	William C. Voelker
December	Check Monitoring Reports & Evaluation Data	William C. Foutch
December	Clinic Work Sessions	Dorothy Caldwell
January	District In-Service Meetings	Dorothy Caldwell
Jan. 11 & 25	Caywood Lab Sessions	William W. Cann
Jan. 12 & 19	Third District Lab Sessions	William W. Cann
Jan. 13 & 20	Pendleton Lab Sessions	William W. Cann
January 21	Board Meeting	Edward E. Ball
	Principals' Seminar	Staff
	Video Taping Activities	William C. Voelker
	Check Monitoring Reports and Evaluation Data	William C. Foutch
	Clinic Work Sessions	Dorothy Caldwell

Calendar of Events - Continued

February	District In-Service Meetings	Dorothy Caldwell
Feb. 8 & 22	Caywood Lab Sessions	William W. Cann
Feb. 2,9,& 16	Third District Lab Sessions	William W. Cann
Feb. 3,10,& 17	Pendleton Lab School Session	William W. Cann
Feb. 8	Board Meeting	Edward E. Ball
	Principals' Seminar	Staff
	Video Taping Activities	William C. Voelker
	Check Monitoring Reports & Evaluation Data	William C. Foutch
	Clinic Work Sessions	Dorothy Caldwell
March	District In-Service Meetings	Dorothy Caldwell
March 8 & 22	Caywood Lab Sessions	William W. Cann
March 2, 9,& 16	Third District Lab Sessions	William W. Cann
March 3,10,&17	Pendleton Lab Sessions	William W. Cann
March 18	Board Meeting	Edward E. Ball
	Principals' Seminar	Staff
	Video Taping Activities	William C. Voelker
	Check Monitoring Reports & Evaluation Data	William C. Foutch
	Clinic Work Sessions	Dorothy Caldwell
April	District In-Service Meetings	Dorothy Caldwell
April 5 & 19	Caywood Lab Sessions	William W. Cann
April 6,18, & 20	Third District Lab Sessions	William W. Cann
April 7,14, & 21	Pendleton Lab Sessions	William W. Cann
April 22	Board Meeting	Edward E. Ball
	Principals' Seminar	Staff
	Video Taping Activities	William C. Voelker
	Laboratory School Testing	William C. Foutch
	Clinic Work Session	Dorothy Caldwell
May	District In-Service Meetings	Dorothy Caldwell
May 20	Board Meeting	Edward E. Ball
	Principals' Seminar	Staff
	Check Monitoring Reports & Evaluation Data	William C. Foutch
June	District In-Service Meetings	Dorothy Caldwell
June 17	Board Meeting	Edward E. Ball
	Summarizing Evaluation Data	William C. Foutch

APPENDIX B

EVALUATION REPORT

(A Report of Standardized Testing in Two Elementary Laboratory Schools 1968-1971)

by

Ivan Russell
Southern Illinois University
Carbondale

1971

TREATMENT AND INTERPRETATION OF
TEST SCORES
FOR
THIRD DISTRICT AND CAYWOOD ELEMENTARY

Although the value of test scores in an evaluation of an instructional program is limited it was decided early in the planning phase of the project that certain test scores would be accumulated and used in the evaluation process. Also, it was determined that the results of the tests would be prepared for teacher consumption and presented to them as an in-service function. In an informal presentation using graphs in overhead form the results were presented, interpreted, and discussed each year except the spring of 1971 when there was not sufficient time to make the presentation. It is planned that the results will be given to teachers in the fall of 1971.

Since the Stanford Achievement Test Battery had been newly standardized at the time it was decided that this test would be used to assess achievement at all grade levels except first where test results tend to have low reliability. The California Test of Mental Maturity was selected to use for the assessment of intelligence. It was planned that these two tests would be treated together for purposes on making gross divisions of students into three groups. The above-average group is constituted by the top three stanines of the California Test of Mental Maturity scores. The average group is made up of the three middle stanines, and the low group the bottom three stanines. The treatment of achievement scores is then the calculation of the mean achievement of each of these three groups. This rough breakdown was selected as appropriate because it results in groups sufficiently

large for the means to be of some value, and it gets away from the use of intelligence test scores as absolute measures of innate ability. Instead it is a rough assessment of the general level of functioning of students in terms of academic learning. Such a rough breakdown is sufficient for assessment of general level of learning and also sufficient for evaluating the effectiveness of the instructional process.

In this report as in the presentations to teachers, data have been treated independently for each elementary school and no attempt made to compare the two. If the reader wishes to make comparisons the data are presented in close proximity and making comparisons is not difficult. It will soon be noted, however, that the two student populations differ widely and that there is little to be gained by making careful comparisons.

First in this report is the presentation of results of the California Test of Mental Maturity for purposes of seeing the nature of the student population of each school in terms of their general levels of academic aptitude. These data are presented in Table 1 and Table 2 and discussed immediately. These same data are used to make the breakdowns into the three groups for calculation of the mean achievement levels within each grade and each school. In these tables two intelligence test distributions are shown covering the beginning and the current year. These values are examined to note whether or not there is a trend evident in the make-up of the student populations of the two schools.

In Table 1, the distributions for Caywood Elementary School are shown. There is a slight trend toward the average taking place in terms of these data. Each grade level shows increasing frequencies in the average category and decreasing numbers in the above-average group. The school as a whole remains considerably above the national norm in terms of distribution of IQ's. Very few children are found in the below-average or low group in Caywood school.

TABLE 1

DISTRIBUTION OF IQ'S FOR CAYWOOD ELEMENTARY SCHOOL FOR 1968 and 1971

GRADE	CATEGORY	NATIONAL	1968	1971
2	Low	23%	0	1.2%
	Average	52%	49%	56%
	Above Average	23%	51%	42.8%
3	Low	23%	6%	7%
	Average	52%	64%	67%
	Above Average	23%	30%	26%
4	Low	23%	9%	5%
	Average	52%	37%	57%
	Above Average	23%	54%	38%
5	Low	23%	2%	0
	Average	52%	46%	66%
	Above Average	23%	52%	34%
6	Low	23%	8%	7%
	Average	52%	46%	55%
	Above Average	23%	46%	38%

This gradual trend toward the mean is probably a function of the demographic movement in the community. This is particularly strengthened by the fact that the IQ levels are moving toward the mean at all grade levels and not in isolated cases as it might be expected if the movement were the result of chance variations. It is probable that the change represents a real change in the population of the school. If this is true it is also probable the teachers will soon notice a difference in the performance levels of the children, particularly if the lower group continues to increase in size. In terms of present performance it is expected that if the students of Caywood work proportional to their measured ability their achievement should exceed the national average by a noticeable amount.

TABLE 2

DISTRIBUTION OF IQ'S FOR THIRD DISTRICT ELEMENTARY SCHOOL FOR 1968 AND 1971

GRADE	CATEGORY	NATIONAL	1968	1971
2	Low	23%	18%	43%
	Average	52%	78%	55%
	Above Average	23%	4%	2%
3	Low	23%	25%	32%
	Average	52%	70%	55%
	Above Average	23%	5%	13%
4	Low	23%	41%	35%
	Average	52%	50%	59%
	Above Average	23%	9%	6%
5	Low	23%	30%	23%
	Average	52%	46%	72%
	Above Average	23%	24%	5%
6	Low	23%	35%	36%
	Average	52%	53%	58%
	Above Average	23%	12%	6%

It is easily noted in Table 2 that the distribution of IQ's in the Third District Elementary School is heavily loaded in the low category. This condition has prevailed during the entire study with very little change evident. The differences noted in the two columns of percents above seem to be the result of random differences since no consistent trend is evident. Probably there is no major change taking place in the population of the Third District School.

These intelligence test scores were used to divide the school populations into three groups labelled throughout this report as the above-average, the average, and the low groups. Then the mean achievement test scores for each grade level on each of the sub-tests of the achievement test battery were calculated. These are shown in a series of tables and discussed by grade level and by school.

Table 3 which follows contains the mean scores for the Caywood second grade for this year (1971). Since they were not tested as first graders, only the one-year test results are available. In other cases more than one year provides the basis for making interpretations. From the results shown in Table 3 it is immediately evident that the second grade students in the above-average group are achieving at a level quite above their grade placement. Since this represents a large portion of the Caywood group this indicates that the children in this group are well along to achieving in the educational program of that school. The highest level is noted in the area of Word Study Skills which generally has been a strong area of the achievement test with this group of students. Word Meaning, which is one of the reading skills is the lowest area for the group. The average group is slightly below the national average in

several of the sub-test areas. Most noticeable are Word Meaning, Paragraph Meaning, and Arithmetic computation. This is an important point of concern when the average group which should be functioning at about the national norm of 2.8 at the time of the test are, in fact, some four-or-so months below that point. The low group which would be expected to be achieving below the national norm for second grade students are, in most areas, several months below. Since this is a small group at Caywood there might be some tendency to forget the fact. It should be remembered, though, that these students will be the ones who later will form the majority of dropouts from school and cause most of the academic and behavior problems in subsequent years. Some program should be available to allow them to feel some success in the years when they are unable to achieve along with their age mates.

TABLE 3

MEAN ACHIEVEMENT
CAYWOOD ELEMENTARY SCHOOL, SECOND GRADE

	1971
Above Average	
Word Meaning	3.2
Paragraph Meaning	3.8
Sci. and Soc. Studies	3.7
Spelling	3.8
Word Study Skills	4.6
Language	3.7
Arith. Comp.	3.5
Arith. Conc.	3.7
Average	
Word Meaning	2.4
Paragraph Meaning	2.5
Sci. and Soc. Studies	2.6
Spelling	2.7
Word Study Skills	3.0
Language	2.7
Arith. Comp.	2.8
Arith. Conc.	2..5
Low	
Word Meaning	1.8
Paragraph Meaning	1.7
Sci. and Soc. Studies	1.8
Spelling	2.0
Word Study Skills	1.6
Language	2.1
Arith. Comp.	2.3
Arith. Conc.	1.5

TABLE 4

MEAN ACHIEVEMENT

CAYWOOD ELEMENTARY SCHOOL, GRADE THREE

Above Average Group	1970	1971	GAIN
Word Meaning	3.0	5.2	2.2
Paragraph Meaning	3.3	4.9	1.6
Spelling	3.4	4.6	1.2
Word St. Skills	4.1	6.1	2.0
Language	3.0	5.3	2.3
Arith. Comp.	2.8	4.0	1.2
Arith. Conc.	3.5	5.5	2.0
Science	3.5	5.1	1.6
Average Group			
Word Meaning	2.7	3.6	.9
Paragraph Meaning	2.6	3.7	1.1
Spelling	2.7	3.7	1.0
Word St. Skills	3.2	4.2	1.0
Language	2.7	4.0	1.3
Arith. Comp.	2.8	3.5	.7
Arith. Conc.	2.8	4.2	1.4
Science	2.7	3.8	1.1
Low Group			
Word Meaning	2.0	2.7	.7
Paragraph Meaning	2.0	2.9	.9
Spelling	2.6	3.1	.5
Word St. Skills	1.7	3.2	1.5
Language	2.8	3.3	.5
Arith. Comp.	2.7	3.1	.4
Arith. Conc.	2.1	3.2	1.1
Science	2.8	2.7	-.1

On the preceeding page the Table 4 contents show the mean achievement of this year's third grade students at Caywood. It also shows the gains made in the previous year for the purpose of noting trends if there are any. As second graders, these students were functioning at about the levels of the present second grade except in the case of the reading areas. They have shown some gain on the national norm values and now are at the same general level as national groups. The above-average group is achieving well above the norms and their gains have been in the range of one ro two or more years of growth in the past year. This is within the range expected for a group of their nature. The average group has gained one or more years this year except in the area of Arithmetic Computation. The low group has approached one year of growth in some areas and has made the expected progress except in the areas of Science and Arithmetic Computation. In general all groups in this third grade seem to be making about the amount of progress we would expect but in no way are they showing outstanding performance for a group with their potential.

The data for grade four follows in Table 5 where it first noted that this group does not contain a low group. Examining the data for the above-average group reveals that their grade placements and their gains fall considerably below the expectancy for them throughout the three years of the program of evaluation. However, in the areas related to reading the gains have been more significant this year than at any time in the past. The group is above grade level in all areas except Arithmetic Computation but they are not as high as they are expected to be. Their gains are lower than we might expect, also.

TABLE 5

MEAN ACHIEVEMENT

CAYWOOD ELEMENTARY SCHOOL, GRADE FOUR

Above Average	1968	1969	1970	1971	1969 Gain	1970 Gain	1971 Gain
Word Meaning	2.4	3.0	4.1	5.6	.6	1.1	1.5
Para. Meaning	2.7	3.3	4.3	5.7	.6	1.0	1.4
Science	2.5	3.9	4.7	5.9	1.4	.8	1.2
Spelling	2.7	3.2	4.2	5.2	.5	1.0	1.0
Word-study	3.1	3.7	4.9	5.5	.6	1.2	.6
Language	2.6	3.1	4.6	5.4	.5	1.5	.8
Arith. Comp.	2.8	3.0	3.8	4.7	.2	.8	.9
Arith. Concepts	2.5	3.4	4.6	5.7	.9	1.2	1.1
AVERAGE							
Word Meaning	2.1	2.6	3.1	4.5	.5	.5	1.4
Para. Meaning	2.2	2.6	3.1	4.5	.4	.5	1.4
Science	2.0	2.7	3.6	4.5	.7	.9	.9
Spelling	2.3	2.8	3.8	4.4	.5	1.0	.6
Word-study	2.2	2.6	3.5	4.0	.4	.9	.5
Language	2.3	2.7	3.5	4.2	.4	.8	.7
Arith. Comp.	2.5	2.8	3.2	4.1	.3	.4	.9
Arith. Concepts	2.1	2.5	3.3	4.5	.4	.8	1.2

In the table which follows it is possible to trace the achievement pattern for the fifth grade at Caywood School for a four-year period. First, the above-average group shows consistent achievement scores well in advance of their actual grade placement. In 1968 these students were at the end of their second grade experience. Their scores were surprisingly high at that time. In fact they were so high that even with the small gains they evidenced in the third grade they remained well above the average for fourth grade students. In 1970 the group made further major gains and with the exception of the one area where major loss seems to have occurred they regained their very high status. In 1971 this group continued to make very significant gains and at this time are very far above the mean for children even at their high ability. Their greatest strength is noted in the areas of science, language, paragraph meaning and spelling where they are very near the mean for students at the beginning of the eighth grade.

Turning to an examination of the scores of the average group, it is evident that they, also, have made high achievement in their second grade experience. Afterward, however, they have failed to make continuous gains of comparable nature. In the third grade they made very low gains in all areas of the test with particularly low progress in paragraph meaning and arithmetic computation. In no area of the test did they gain at the rate expected for them. As fifth grade students they have fallen below grade placement in all areas of the test, and in most areas they are a full year behind.

The low group were well along in the second grade year but seemed to lose their fast start in the third and fourth years. This year there were no students in the fifth grade with IQ's placing them in the lower three stanines therefore the table is not completed in the columns for 1971.

TABLE 6

MEAN ACHIEVEMENT

CAYWOOD ELEMENTARY SCHOOL, GRADE FIVE

	1968	1969	1970	1971	1969 Gain	1970 Gain	1971 Gain
Above Average							
Word Meaning	4.3	5.0	6.0	6.8	.7	1.0	.8
Paragraph Meaning	4.5	4.9	5.7	7.7	.4	.8	2.0
Spelling	4.2	5.1	5.7	7.6	.9	.6	1.9
Word-study skills	4.1	4.5	6.1	---	.4	1.6	---
Language	5.3	5.7	6.2	7.7	.4	.5	1.5
Arith. Computation	5.0	5.8	4.1	6.3	.8	- 1.7	2.2
Arith. Concepts	3.5	4.3	6.2	6.7	.8	1.9	.5
Science	4.6	5.6	5.5	7.9	1.0	- .1	2.4
Average							
Word Meaning	3.0	3.6	4.6	4.8	.6	1.0	.2
Paragraph Meaning	3.2	3.5	4.3	5.0	.3	.8	.7
Spelling	3.3	3.9	4.4	5.2	.6	.5	.8
Word-study skills	3.3	3.8	4.3	---	.5	.5	---
Language	3.5	3.5	4.2	4.9	--	.7	.7
Arith. Computation	3.5	3.9	3.9	4.6	.4	--	.7
Arith. Concepts	3.1	3.6	4.7	5.1	.5	1.1	.4
Science	3.3	3.9	4.5	5.0	.6	.6	.5
Low							
Word Meaning	2.9	2.7	3.9		- .2	1.2	
Paragraph Meaning	2.8	2.7	3.8		- .1	1.1	
Spelling	3.6	3.5	3.5		- .1	--	
Word-study skills	3.0	3.4	2.7		.4	- .7	
Language	2.6	2.6	2.7		--	.1	
Arith. Computation	3.1	2.9	3.9		- .2	1.0	
Arith. Concepts	3.0	3.4	3.5		.4	.1	
Science	2.7	2.8	3.5		.1	.7	

Table 7 on the following page contains the mean scores for the sixth grade students at Caywood in 1971 and the preceeding years. The above-average group began third grade well above the norm and at about the achievement level we would expect of them with their high ability. Their gains in 1969 kept them high in achievement in all areas of the test. Again in 1970 they continued their high gains and in 1971 they continued to be well above the norm in all areas of the test except arithmetic computation.

The average group were noticeably below the norm in several areas at the end of their year in third grade. Their gains have been quite irregular and in most areas of the test they are a full year behind the national norm at the end of their sixth grade experience.

The low group has generally been able to make significant gains in many areas of the test and at the end of their sixth grade experience, while they are considerably below the national norm are closer to their measured potential than the average group.

TABLE 7

MEAN ACHIEVEMENT

CAYWOOD ELEMENTARY SCHOOL, GRADE SIX

A bove Average	1968	1969	1970	1971	1969 Gain	1970 Gain	1971 Gain
Word Meaning	4.8	5.9	6.5	7.8	1.1	.6	1.3
Paragraph Meaning	4.7	5.6	7.0	8.7	.9	1.4	1.7
Spelling	4.4	5.3	6.3	7.5	.9	1.0	1.2
Word-study skills	4.6	5.6	6.6	---	1.0	1.0	---
Language	4.7	5.6	5.8	8.2	.9	.2	2.4
Arith. Computation	3.7	4.6	6.8	6.6	.9	2.2	-.2
Arith. Concepts	4.8	5.7	7.3	8.1	.9	1.6	.8
Arith. Application	4.8	5.3	6.9	8.9	.5	1.6	2.0
Social studies	5.1	5.6	---	8.5	.5	---	---
Science	5.2	5.7	7.5	9.1	.5	1.8	1.6
A verage							
Word Meaning	3.3	4.0	4.8	5.7	.7	.8	.9
Paragraph Meaning	3.4	3.9	5.0	6.0	.5	1.1	1.0
Spelling	3.6	4.2	4.7	6.0	.6	.5	1.3
Word-study skills	2.8	3.8	4.8	---	1.0	1.0	---
Language	3.2	4.1	4.8	5.6	.9	.7	.8
Arith. Computation	3.5	4.2	5.3	5.1	.7	1.1	-.2
Arith. Concepts	3.6	4.6	5.3	6.0	1.0	.7	.7
Arith. Application	3.8	4.4	5.3	6.1	.6	.9	.8
Social Studies	4.0	4.2	---	6.1	.2	---	---
Science	3.8	4.4	5.0	6.0	.6	.6	1.0
Low							
Word Meaning	3.2	3.2	3.9	3.7	---	.7	-.2
Paragraph Meaning	3.3	3.6	4.5	4.4	.3	.9	-.1
Spelling	3.3	3.3	3.7	3.8	---	.4	.1
Word-study skills	2.5	2.8	3.6	---	.3	.8	---
Language	2.7	3.2	4.7	3.7	.5	1.5	- 1.0
Arith. Computation	3.3	3.6	5.0	4.8	.3	1.4	- .2
Arith. Concepts	2.8	3.1	4.5	5.0	.3	1.4	.5
Arith. Application	2.9	3.4	4.8	4.8	.5	1.4	0
Social Studies	3.6	3.8	---	5.0	.2	---	---
Science	3.5	3.5	4.0	4.0	---	.5	0

The contents of Table 8 on the following page relate to the sixth grade of 1970 which, although included in the study for the preceeding years is now in the junior high school rather than at Caywood Elementary School. The mean achievement scores for the group are noticeably higher than for the sixth grade of 1971. This is true at each of the three levels within the total sixth grade. If these values are taken as indicative of the typical earlier achievement of the sixth grade students in the Caywood school it would seem that something has caused a deterioration of the performance at that level in this particular school. Whether this is a reliable indicator is not possible to judge but it is an important matter to be considered in any attempt to evaluate the experiences of the past three years. Some evidence supports the idea that these scores are valid representatives of earlier levels of achievement when one notes the similarity of the profiles of achievement of the two sixth grades. The reading sub-tests are consistently among the lower performance levels along with arithmetic computation. The similarity of the two profiles with one considerably below the other gives strength to the idea that perhaps the students of this year failed to give the effort to learning and even perhaps the emphasis on achievement might be somewhat less now than in the past. This is, of course, a simple guess at the causes for the noticeable difference. It may be the farthest possible explanation from the truth.

TABLE 8

MEAN ACHIEVEMENT

CAYWOOD ELEMENTARY SCHOOL, SIXTH GRADE (1970)

	GRADE PLACEMENT SCORES			GAINS	GAINS
	1968	1969	1970	1969	1970
Word Meaning	6.3	7.3	8.3	1.0	1.0
Paragraph Meaning	6.7	7.1	8.7	.4	1.6
Spelling	6.2	7.2	7.9	1.0	.7
Language	6.7	7.6	8.6	.9	1.0
Arith. Computation	5.2	8.5	7.5	3.2	- 1.0
Arith. Concepts	6.3	7.0	8.2	.7	1.2
Arith. Application	6.2	7.2	8.7	1.0	1.5
Social Studies	6.4	7.6	9.1	1.2	1.5
Science	7.1	7.6	9.5	.5	1.9
Word Meaning	4.8	5.4	6.0	- .6	.6
Paragraph Meaning	5.0	4.9	6.3	- .1	1.4
Spelling	4.8	5.4	6.2	.6	.8
Language	4.7	5.4	6.1	.7	.7
Arith. Computation	4.4	5.1	6.1	.7	1.0
Arith. Concepts	5.2	5.5	6.5	.3	1.0
Arith. Application	4.7	5.3	6.4	.6	.9
Social Studies	4.8	5.3	6.5	.5	1.2
Science	5.1	5.2	6.5	.1	1.3
Word Meaning	4.4	4.3	6.0	- .1	1.7
Paragraph Meaning	3.4	4.4	5.9	1.0	.5
Spelling	3.8	4.2	3.7	.4	- .5
Language	3.6	3.7	5.1	.1	1.4
Arith. Computation	3.6	4.8	7.9	1.2	3.1
Arith. Concepts	4.4	5.4	8.8	1.0	3.4
Arith. Application	4.7	4.7	9.1	---	4.4
Social Studies	4.5	4.6	6.6	.1	2.0
Science	4.4	3.7	5.4	- .7	1.7

On the preceeding pages the mean scores in achievement have been presented for the Caywood Elementary School and some attempt has been made to interpret the contents of the tables for the reader. In the pages to follow the same effort is made to present and discuss the mean achievement scores for the Third District Elementary School.

Third District Elementary is a school for children in the lower socio-economic area of an urban community. As indicated by the results of the intelligence test the students in this school are found in the low ability group in large frequencies. There are very few students with measured IQ's in the upper stanines. On the basis of this approach to establishing an expectancy for achievement the Third District students are not expected, as a total group, to achieve at the national norm but several points below it. However, when the groups are broken down into the three sub-groups shown on each table, it is then possible to keep the national norm in mind when the values in the table are interpreted.

Table 9 on the following page shows the mean achievement values for the second grade on this test (1971). Since they were not tested in 1970 it is not possible to examine gains but only their mean levels of achievement at the end of the second grade. The upper ability group which might be expected to achieve well ahead of the national norm is in fact below the national norm for an average group in three areas of the battery. (Arithmetic concepts, language, and paragraph meaning). Only in the area of Word Study Skills are they able to score at the level we would predict for them on the basis of their measured ability.

TABLE 9

MEAN ACHIEVEMENT

THIRD DISTRICT ELEMENTARY SCHOOL, SECOND GRADE

	1971
Above Average	
Word Meaning	2.9
Paragraph Meaning	2.1
Sci. and Soc. Studies	3.3
Spelling	3.7
Word Study Skills	4.2
Language	2.6
Arith. Comp.	2.9
Arith. Conc.	2.6
Low	
Word Meaning	2.3
Paragraph Meaning	2.4
Sci. and Soc. Studies	2.3
Spelling	2.6
Word Study Skills	2.5
Language	2.3
Arith. Comp.	2.5
Arith. Conc.	2.3
Low	
Word Meaning	1.6
Paragraph Meaning	1.8
Sci.and Sco. Studies	2.1
Spelling	1.6
Language	2.1
Arith. Comp.	2.0
Arith Conc.	1.9
Word Study Skills	1.7

The average group which is expected to achieve at 2.8 in each sub-test fails to reach that level on any one of the sub-tests. In fact they are from three to six months below that level at all points. The low group which is quite sizeable in this school is on the average a year below their grade placement. While this is to be expected, it must be realized that this places them at the level ordinarily accepted to be the starting place for entrance to the second grade whereas they are to be entering the third grade this fall.

Table 10 on the following page shows the mean achievement scores and the gains for the third grade of this year at Third District. Examining the above-average group, we see that they ended the second grade somewhat higher than the second grade of this year in many of the sub-tests, particularly the arithmetic and science areas. However, at the end of their third year of school they have, in all cases failed to reach the mean expected for even an average group. Their gains are quite small and negligible in many cases.

The average group which is a very large portion of the total population began the third grade several months behind the national norm for an average group and ended the third grade even further behind. In most cases they failed to make even a half year of gain in the full year. In the cases of paragraph meaning and of arithmetic computation they were able to make a full nine months of gain in the national norm but in both areas they remain considerably below the norm at this point.

The low group which also is a large portion of this population began the third grade at about the level of achievement which is expected of them and made gains at least equal to the average group in many of the test areas. They remain noticeably below the national norm and at a point in achievement where it is evident they are going to have great difficulty maintaining a reasonable growth rate in the future unless special programs are developed for them.

TABLE 10

MEAN ACHIEVEMENT

THIRD DISTRICT ELEMENTARY SCHOOL, THIRD GRADE

	1970	1971	Gain
Above Average			
Word Meaning	2.9	3.6	.7
Paragraph Meaning	2.7	3.3	.6
Spelling	3.0	3.4	.4
Word St. Skills	3.6	3.7	.1
Language	2.8	3.0	.2
Arith. Comp.	3.2	3.1	- .1
Arith Conc.	3.4	3.8	.4
Science	3.7	3.3	.6
Average			
Word Meaning	2.4	2.9	.5
Paragraph Meaning	2.2	3.1	.9
Spelling	2.5	2.7	.2
Word St. Skills	2.4	2.8	.4
Language	2.6	2.9	.3
Arith. Comp.	2.5	3.4	.9
Arith. Conc.	2.7	2.7	0
Low			
Word Meaning	1.9	2.2	.3
Paragraph Meaning	1.8	2.1	.3
Spelling	1.9	2.7	.8
Word St. Skills	1.7	2.5	.8
Language	2.2	2.3	.1
Arith. Comp.	2.0	2.7	.7
Arith. Conc.	1.7	2.4	.7
Science	1.9	2.2	.3

Table 11 shows the achievement values for the fourth grade and an examination of the means and gains for the above-average group reveals that they experienced the same slow start the preceeding grade levels have shown. They began the fourth grade almost a full year below the means for an average group yet in the fourth grade they made gains which are noticeably high and now exceed the national norm by several months in all but Spelling and Arithmetic Computation. This group should, however, according to their measured ability, be achieving even higher. It is encouraging to note the major gains made in the fourth grade and to see that it is possible to make these gains after beginning at such a slow pace.

The average group has consistently been below the expected level of achievement and despite some gains of more than usual they remain a full year and more below the national norm for a group with their measured intelligence.

The low group shows much the same pattern as the other two groups in that it starts somewhat slow and makes fair gains in most areas but ends the fourth grade considerably below the norm and somewhat below the level expected for students of this measured intelligence.

TABLE 11

MEAN ACHIEVEMENT

THIRD DISTRICT ELEMENTARY SCHOOL, GRADE FOUR

Above Average	1968	1969	1970	1971	1969 Gain	1970 Gain	1971 Gain
Word Meaning	2.6	3.3	3.4	5.5	.7	.1	2.1
Paragraph Meaning	3.6	3.5	3.1	5.3	-.1	- .4	2.2
Spelling	2.5	3.1	3.1	4.8	.6	.0	1.7
Word Study	4.5	2.8	3.0	6.4	-1.7	.2	3.4
Arith. Computation	2.3	2.4	3.1	4.3	.1	.7	1.2
Arith. Concepts	--	3.3	3.5	5.9	----	.2	2.4
Word Meaning	1.7	2.3	2.5	3.3	.6	.2	.8
Paragraph Meaning	1.8	2.3	2.5	3.5	.5	.2	1.0
Spelling	1.8	2.1	2.9	3.7	.3	.8	.8
Word Study	1.7	2.6	2.9	3.5	.9	.3	.6
Arith. Computation	1.9	2.2	2.8	3.4	.3	.6	.6
Arith. Concepts	--	2.2	2.6	3.7	--	.4	1..1
Word Meaning	1.4	1.8	2.3	2.7	.4	.5	.4
Paragraph Meaning	1.5	1.8	2.2	2.7	.3	.3	.5
Spelling	1.5	1.7	2.4	3.2	.2	.7	.8
Word Study	1.4	2.0	1.9	2.5	.6	- .1	.6
Arith. Computation	1.5	1.6	2.8	3.1	.1	1.2	.3
Arith. Concepts	--	1.7	2.1	3.0	--	.4	.9

Table 12 on the following page contains the mean scores for the fifth grade for the four preceeding years. Examination of them reveals for the above-average group that they began the third grade well along in achievement except in the areas of arithmetic computation and science. In the third grade they made several moderate gains but in language and word study skills they made little progress. In fourth grade their gains were negligible except in arithmetic computation where they gained a full year of achievement which for them was much less than their potential. In fifth grade these students in the high group have made remarkable gains in all areas of the test. They are now at the grade placement or above in almost all areas and well above it in spelling.

The average group were several months below the mean for typical average students in many areas of the test. In third grade their progress was low and this same pattern continued for their fourth grade year. In 1971 they have shown excellent gains in most areas of the test. However, they remain below the average for students of their ability in all areas of the test. They will be entering the sixth grade well below grade level which may handicap them in making reasonable progress.

The low group has made rather consistent gains which are not large but in the fifth grade they show excellent gains in the areas of paragraph meaning and arithmetic concepts. They will enter the sixth grade approximately two years below grade placement in most areas of the test.

TABLE 12

MEAN ACHIEVEMENT

THIRD DISTRICT ELEMENTARY SCHOOL, GRADE FIVE

	1968	1969	1970	1971	1969	1970	1971
Above Average							
Word Meaning	3.4	4.3	4.2	6.0	.9	- .1	1.8
Paragraph Meaning	3.6	4.2	4.3	6.4	.6	.1	2.1
Spelling	3.5	4.2	4.3	7.5	.7	.1	3.2
Word Study	4.8	5.0	4.7	---	.2	- .3	---
Language	3.5	3.6	4.0	6.7	.1	.4	2.7
Arith. Computation	2.6	3.2	4.2	5.7	.6	1.0	1.5
Arith. Concepts	3.1	4.4	4.8	6.3	1.3	.4	1.5
Science	2.4	4.2	3.8	5.8	1.8	- .4	2.0
Average							
Word Meaning	2.9	3.3	3.9	4.7	.4	.6	.8
Paragraph Meaning	2.7	3.2	3.8	4.9	.5	.6	1.1
Spelling	2.6	3.3	4.0	5.0	.7	.7	1.0
Word Study	2.7	2.9	3.5	----	.2	.6	---
Language	2.8	3.1	3.6	4.5	.3	.5	.9
Arith. Computation	2.6	3.0	3.4	4.1	.4	.4	.7
Arithc Concepts	2.6	3.2	3.6	5.4	.6	.4	1.8
Science	2.5	3.0	4.2	4.9	.5	1.2	.5
LOw							
Word Meaning	2.1	2.7	3.1	3.5	.6	.4	.4
Paragraph Meaning	2.1	2.3	2.9	4.1	.2	.6	1.2
Spelling	2.0	2.5	3.3	3.7	.5	.8	.4
Word Study	1.7	2.0	2.8	---	.3	.8	---
Language	2.3	2.5	2.7	3.1	.2	.2	.4
Arith. Computation	2.2	2.4	3.2	3.8	.2	.8	.6
Arith. Concepts	1.9	2.2	2.7	3.8	.3	.5	1.1
Science	2.0	2.1	3.4	3.7	.1	1.3	.3

Table 13 on the following page contains the means for the sixth grade for the past four years along with the respective gains in achievement. Examination of these values reveals that this group generally follows the pattern established by the younger groups at Third District. The above-average group held a high achievement rate in their earlier grades but in several of the test areas they have relatively little progress in the present year. At the end of the sixth grade they are below the national norm in four areas of the test. In arithmetic computation they fall more than a full year below the national norm for an average group and these students have much higher measured potential to learn.

The average group falls consistently below the national norm by as much as a year and a half of achievement. Particular weaknesses are shown in the skills of reading and arithmetic. They will be entering the seventh grade considerably below the average for the nation and may find a lot of difficulty in making the appropriate progress in the future.

The low group shows the same pattern as the average group but somewhat lower in achievement. One exception is that their highest achievement is in arithmetic computation. However, they fall more than two years below their grade placement in this skill.

TABLE 13

MEAN ACHIEVEMENT

THIRD DISTRICT ELEMENTARY SCHOOL, GRADE SIX

	1968	1969	1970	1971	1969 Gain	1970 Gain	1971 Gain
Above Average							
Word Meaning	4.7	6.3	6.9	7.6	1.6	.6	.7
Paragraph Meaning	4.9	5.4	6.3	7.6	.5	.9	1.3
Spelling	4.6	5.9	6.6	8.4	1.3	.7	1.8
Word Study	4.9	5.6	7.0	---	.7	1.4	---
Language	4.6	5.7	5.0	6.5	1.1	- .7	1.5
Arith. Computation	3.5	4.8	5.8	5.4	1.3	1.0	- .4
Arith. Concepts	3.9	4.9	6.5	6.6	1.0	1.6	.1
Arith. Application	4.5	5.4	6.4	6.9	.9	1.0	.5
Social Studies	5.5	5.3	--	6.3	- .2	--	---
Science	4.6	5.8	7.5	7.1	1.2	1.7	- .4
Average							
Word Meaning	3.4	4.4	4.4	5.0	1.0	--	.6
Paragraph Meaning	3.5	3.8	4.7	5.4	.3	.9	.7
Spelling	3.6	4.1	4.7	5.6	.5	.6	.9
Word Study	3.1	3.5	4.6	---	.4	1.1	--
Language	3.1	3.8	4.4	5.0	.7	.6	.6
Arith. Computation	3.7	4.4	5.0	4.6	.7	.6	-.4
Arith. Concepts	3.4	4.0	4.9	5.6	.6	.9	.7
Arith. Application	3.6	4.0	4.8	5.3	.4	.8	.5
Social Studies	3.8	4.2	--	5.2	.4	--	--
Science	3.8	4.2	4.7	5.1	.4	.5	.4
Low							
Word Meaning	2.9	3.3	3.7	3.6	.4	.4	- .1
Paragraph Meaning	2.8	3.2	3.5	4.3	.4	.3	.8
Spelling	3.1	3.5	3.8	4.4	.4	.3	.6
Word Study	2.3	2.7	3.0	---	.4	.3	--
Language	2.5	3.0	3.9	3.6	.5	.9	-.3
Arith. Computation	3.0	3.7	4.4	4.5	.7	.7	.1
Arith. Concepts	2.7	2.9	3.7	4.5	.2	.8	.8
Arith. Application	3.2	3.5	3.7	4.1	.3	.2	.4
Social Studies	3.5	3.5	--	4.1	.0	--	---
Science	3.4	3.5	3.7	3.9	.1	.2	.2

Since the sixth grade of 1970 was a part of the evaluation in the earlier years it is included for Third District as it was for Caywood. For the above-average group the achievement pattern is not unlike the pattern seen in the sixth grade of this year. In some areas of the test the sixth grade of 1970 exceed the 1971 group, i.e., paragraph meaning, spelling, language, and arithmetic. However, in word meaning the 1971 sixth grade exceeds the 1970 although it is not by a large amount. The present sixth grade did make higher gains in 1971 than the gains made by the sixth grade of last year.

The average group of 1970 consistently achieved higher than the average group of 1971. Their pattern was almost identical with a few minor exceptions. The most evident weakness for both groups was in arithmetic computation.

The low group of 1970 has an almost identical achievement pattern with the 1971 group as was pointed out for the two upper groups as well. While there are a few deviations the two groups ended their sixth grade at about the same levels.

TABLE 14

MEAN ACHIEVEMENT

THIRD DISTRICT ELEMENTARY SCHOOL, GRADE SIX (1970)

	1968	1969	1970	GAINS 1969	GAINS 1970
Above Average					
Word Meaning	5.8	6.6	6.7	.8	.1
Paragraph Meaning	5.9	6.4	7.8	.5	1.4
Spelling	5.8	6.2	8.7	.4	2.5
Language	5.3	5.9	7.2	.6	1.3
Arith. Computation	5.2	5.6	6.5	.4	.9
Arith. Concepts	5.0	5.8	6.4	.8	.6
Arith. Application	5.5	5.9	7.8	.4	1.9
Social Studies	6.1	5.8	6.6	- .3	.8
Science	6.1	5.9	7.6	- .2	1.7
Average					
Word Meaning	4.6	5.4	5.4	.8	0
Paragraph Meaning	4.7	5.3	5.6	.6	.3
Spelling	4.5	5.3	5.8	.8	.5
Language	4.3	5.2	5.2	.9	0
Arith. Computation	4.7	5.1	5.0	.4	-.1
Arith. Concepts	4.2	5.0	5.7	.8	.7
Arith. Application	4.7	5.4	5.9	.7	.5
Social Studies	4.8	5.3	5.3	.5	0
Science	4.8	5.0	5.9	.2	.9
Low					
Word Meaning	3.8	4.2	4.1	.4	-.1
Paragraph Meaning	3.2	3.9	4.3	.7	.4
Spelling	3.8	4.3	4.4	.5	-.1
Language	3.2	4.2	3.9	1.0	-.3
Arith. Computation	4.2	4.8	4.3	.6	-.5
Arith. Concepts	2.9	4.5	4.3	1.6	-.2
Arith. Application	3.3	4.1	4.0	.8	-.1
Social Studies	3.6	4.3	4.2	.7	-.1
Science	4.0	4.0	4.3	0	.3

Summary and Conclusions:

Intelligence and achievement test data have been treated and presented for Caywood and Third District Elementary schools in the preceeding pages. Interpretations of the data contained in several tables show particular characteristics of the achievement pattern for each grade level for each of the schools. Since data are treated in a longitudinal fashion, it is possible to see what progress is made by a particular group of students over a period of four grade levels in the elementary years.

It was pointed out in the beginning that the two schools differ considerably in their makeup as far as intelligence test results are considered. Caywood is heavily loaded at the upper end of the intelligence scale while Third District is heavy in frequencies of lower measured ability. This is somewhat accounted for in the treatment of data by grouping the students into groups made up of three stanines on the CTMM. Then their mean achievement scores are calculated on this basis.

In both groups the above-average students show a similar achievement pattern although in Caywood they are achieving at a higher level. In the earlier years of school this group of able students tend to make a fast start but in the upper levels they begin to drop in their rate of achievement. In Caywood they remain well above the national norm despite this slowing of progress, but in Third District this group falls below the national norm in several of the sub-test areas. In this treatment of data for the above average groups two sub-test areas of the battery fall consistently low for both schools. In the reading areas and in the skill of arithmetic computation they tend to score at

levels lower than would be expected for groups of their ability. Whether this indicates a weakness in the curriculum in these areas or something unknown is a matter to be determined with a more detailed study. In Word Study Skills the groups generally tend to score higher than would be predicted for a group of their measured ability.

The average group in both schools shows less progress than would be predicted for them in most areas of the curriculum. This is not accounted for in the study and must be examined within the context of the school to determine which causes may be contributing to the problem. Average students in the two schools are expected to make about one years growth but in most instances this group fails to end the year in a position of average progress. In the case of Caywood students they often are able to maintain a level approximating the national norm but in Third District they fall considerably below the norm in most instances. This is particularly true in the troublesome areas of reading and arithmetic computation.

The low-ability groups in both schools tend to follow the same general pattern as found in the average groups except that they are achieving at lower levels. In general, they are at the levels which would be expected for their ability levels. This is true in both schools, In terms of particular skills the less able students tend to show more ability in the area of arithmetic computation than is expected for them whereas their more able classmates fall behind. This is a tendency which should be investigated further since it cannot be explained simply.

The results of this study of test scores reveals problem areas which exist in the two schools but it does not indicate the solutions. It is important that these findings be examined carefully and in terms of the nature of the program and of the communities.

There is every indication that the groups studied here are sufficiently different in their levels of achievement to be treated as individual groups for instructional purposes. At the same time there is the possibility that these test results could be used as diagnostic tools for each group and they could be treated for their weaknesses rather than taught in a regular program which is designed not on the basis of needs but on the basis of a general feeling about school.

It is also possible to make a real determination to reverse the trend toward lower achievement gains in the upper grade levels. One way which has been found to do this is to give students a firmer foundation in the early years by concentrating upon the skill development which will be needed in later years. This may somewhat retard achievement test scores in the early years but students then begin to show much greater gains in the later levels of the school program. The pattern shown by students in this program is the typical pattern shown in a very traditional school program. It might be reversable.

APPENDIX C

DESCRIPTION OF CAYWOOD ELEMENTARY SCHOOL

May, 1970

CAYWOOD ELEMENTARY SCHOOL

FT. MITCHELL, KENTUCKY 41017

A TITLE III LABORATORY
SCHOOL OF REGION IV-A
MAY 1970

A TITLE III LABORATORY SCHOOL

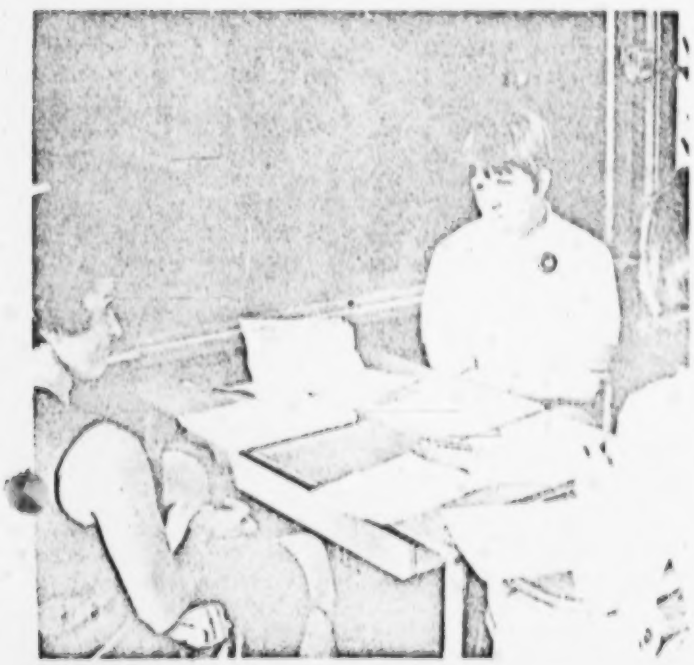
The James A. Caywood Elementary School is completing its second year as a laboratory school in Region IV-A of the Title III program in Kentucky, and has been actively involved in more effectively utilizing research as well as carrying on an action research program under laboratory conditions with a goal of developing imaginative, creative, and innovative solutions to its own identified problems and needs.

Under Region IV-A Title III guidelines, laboratory schools proceed through three phases – (1) analysis of present program (including analysis of pupil personnel, curriculum, and instructional procedures, (2) design on new procedures or strategies to meet the needs identified in the analysis phase, and (3) implementation of this design into a program which will be innovative to the school. Bench marks are set up for evaluation, redesign, and further experimentation and extension.

Caywood is in phase three of this process. The faculty expressed a strong need to move this school from a conventional organization toward a continuous progress nongraded organization as a scheme for dealing with the wide range of abilities found among the students. The strategy or program design for accomplishing this was team teaching. Teams were organized at grade level with each team accepting the challenge to cooperatively provide for the continuous progress of every child for which the team was responsible. Thus the continuous progress or non-graded school should evolve. To further enhance this evolutionary process the teams were renamed as Primary I, Primary II, Primary III, Intermediate IV, Intermediate V, and Intermediate VI.

THE CAYWOOD STAFF

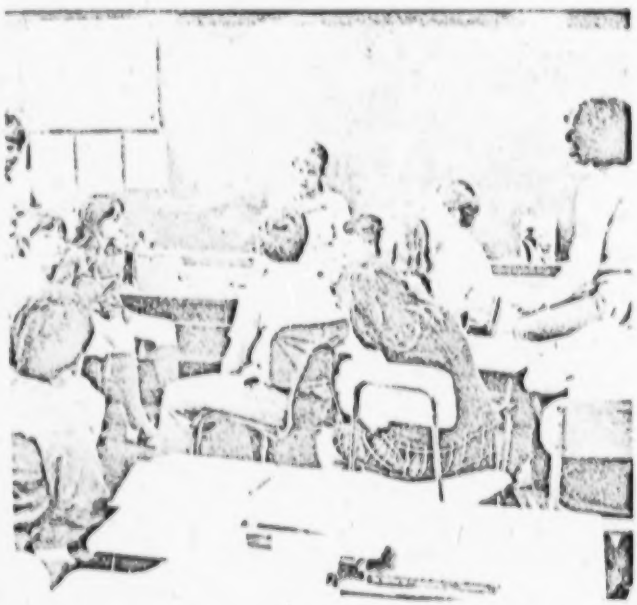
The current staff of Caywood School includes twenty-six teachers, a part-time librarian, a part-time music teacher, and a part-time physical education instructor. On a limited basis the services of a speech therapist, a band director, a reading consultant and a general supervisor are available. A full-time secretary to the principal is employed. Student-aides come from Dixie Heights High School and from the University of Kentucky Northern Community College and make a real contribution to the program. In addition, volunteer parents give substantial assistance to the teaching teams and the library services.



OVERVIEW

During the 1968-69 school year the Caywood Elementary School staff began background studies of innovative school programs which would lead to the desirable changes they wished to implement during this current school year. Using weekly discussion and study groups and with the help of outside consultants they began by looking at the children they were teaching. Through some very positive direction in the areas of child growth and development, and guidance, they were able to develop a new enrollment sheet which provided more pertinent information about each child. This led to the development of a more meaningful cumulative record of each child's development and growth.

During a two-week workshop prior to the opening of school in September 1969, they made plans to move slowly, but deliberately, into the areas of team teaching and individualized instruction, at the same time moving toward the concept of continuous progress for each child.



To inform the parents, a panel of the grade-level instructional teams presented the ideas at the initial P.T.A. meeting in September 1969. (All during the previous school year parents had been kept informed concerning the progress of the Title III program.) To further inform them, parents were invited to meet with the grade-level teams at the October P.T.A. meeting, at which time more information and more details could be shared and questions could be answered.

The discussion and study groups are continuing. From time to time progress is evaluated, and there is a sharing of what is happening at various instructional levels. Growth has continued, through contacts with additional outside consultants. Long range plans include a much broader approach to the individualized instruction concept.

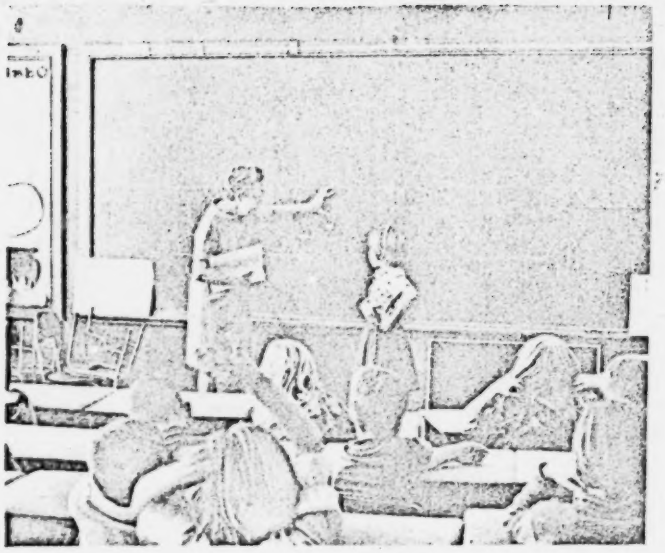
TEAM PLANNING

Team teaching cannot work successfully without team planning, daily plans as well as weekly. Short range, and long range plans must be agreed upon so that the day moves smoothly and to the advantage of the children.

Believing that team teaching, of necessity, involves the complete staff in the area of team planning, the Caywood instructional teams meet for a planning session each morning, prior to the opening of school.

To achieve this planning time for the classroom teachers, the special instructors and the principal agreed to care for the early bus children.

Additional team planning time was achieved through the efforts of the special instructors in back-to-back scheduling for music, physical education and library. This allows most teams three additional thirty-minute planning sessions per wee



TYPICAL EXAMPLES OF THE PROGRAM

A. Individualized Instruction (Primary II Level)

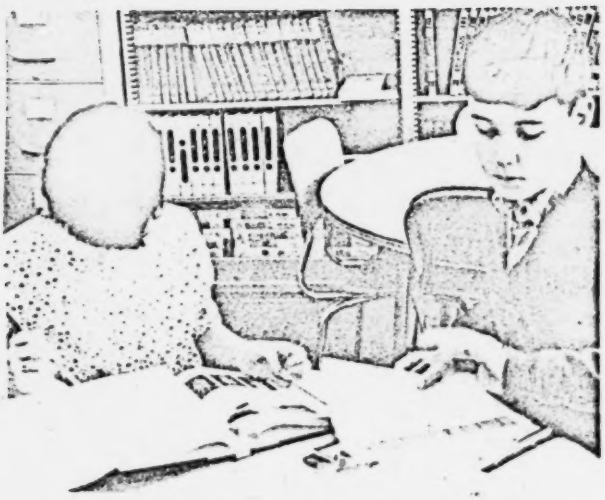
At the Primary II level an accelerated spelling group has been implemented. The group is composed of those children who can spell easily and more quickly than a spelling-book lesson requires, who can follow written directions, and can do their work individually.

Each child does the lessons in the book at his own rate, and after he has finished the written exercises, they are checked by the teacher. The child is then allowed to take the test for that lesson, and since the tests are on tape, the teacher is freed from this administrative chore.

When a child has finished the book, he continues his spelling work on papers prepared by the teacher. Each lesson has twenty words selected from stories in the basic reader. Exercises are also provided, and the testing procedure is the same.

B. Team Teaching (Primary III Level)

While at each instructional level some team teaching is being done, it is left with each team to develop or devise ways of accomplishing their goals. At the Primary III level, where we have three groups of children in three classrooms, four teachers work with them as a team. To utilize all available space in the building, one of the team members meets with a group of children in the lunchroom, where they are concentrating on dictionary skills. While she has this group, the other team members work with smaller groups in the classrooms in special areas of need.



C. Use of Individual Packets (Intermediate VI Level)

The Intermediate VI level team teaching in the area of science is one phase of the Caywood innovative program. Three teachers and three groups of children are involved. The KET Science Series is used as the core for the program with the team sharing the work of preparing learning packets for the students' use. A variety of science textbooks are used to supplement the program.

REPORTING TO PARENTS

Being an experimental school, Caywood was allowed to extend its reporting periods from six weeks to nine weeks, this school year. One of the most important achievements of this school year has been the opportunity to schedule parent-teacher conferences for all parents. Approximately ninety-five percent of the parents responded to this project. Those who could not come for a conference were contacted by telephone or with a note from the teacher. Each parent had the opportunity for two conferences during this school year. The released time for the classroom teachers to conduct the conferences was made possible by those Caywood parents who were certified to teach and, who did so on a volunteer basis, with the Caywood P.T.A. paying each a token sum to assist with this most important project.

Meeting the parents, having them come to school, gave the staff another opportunity to discuss and explain the changes in the school program this year. A better understanding on the part of parents, as well as increased interest in the total school program, is evident at every instructional level.

At each level additional inserts were included in the report card. These were devised by the teaching teams to further interpret the child's progress to the parent.

EVALUATION

Team teaching provides for the maximum in instruction, whether it be for large group instruction or small group work, because it combines the talents and ideas of more than one teacher. More time is available for individualization of instruction when a teaching team works with a group of students. With the use of packets of teacher-prepared materials the student is allowed to work at his own rate, requesting assistance when needed. The daily team planning sessions encourage cooperation and sharing of ideas. They work to the student's advantage when more than one teacher evaluates his work and plans cooperatively for his future assignments.

The program has been a challenge to all persons. It is obvious that the interest level of the students has risen, and a higher level of motivation exists for both students and staff.

Mildred Tupman,
Principal

NORTHERN KENTUCKY IN-SERVICE
INNOVATION CENTER
Region IV-A, ESEA Title II:

Edward E. Ball.....Director
William W. Cann.....Coordinator,
Laboratory School Experimentation
Dorothy Caldwell.....Coordinator,
In-Service
Curtis Foutch.....Coordinator,
Evaluation and Experimentation
Wm. C. Voelker...Video Tape Specialist

EDUCATIONAL AGENCY
Campbell County Board of Education
Charles E. McCormick, Superintendent
Alexandria, Kentucky

APPENDIX D

DESCRIPTION OF PENDLETON COUNTY HIGH SCHOOL

December, 1969

Reproduced by Kentucky Department of Education's ESEA Title III Office
for state-wide dissemination

PENDLETON HIGH SCHOOL

FALMOUTH, KENTUCKY 41040

A TITLE III LABORATORY
SCHOOL OF REGION IV-A
DECEMBER 1969

A TITLE III LABORATORY SCHOOL

Pendleton County High School is serving as a Title III laboratory school in Region IV-A of Kentucky. The region comprises 10 northern Kentucky counties. Pendleton began serving as the laboratory school in October of 1968. Thirteen months later, the school began computerized flexible modular scheduling along with some other innovations. This brochure will briefly explain the program at Pendleton.

PENDLETON'S PAST

Pendleton County High School was originally a consolidation of two smaller rural high schools - Butler and Morgan. The school began operation in the fall of 1959 with an enrollment of 360. The school grew and a building addition in 1964 doubled the amount of classroom space.

In 1967 Pendleton attained the comprehensive rating from the State Department of Education. At the time Pendleton was the smallest school in Kentucky with a comprehensive rating. The enrollment was 550.

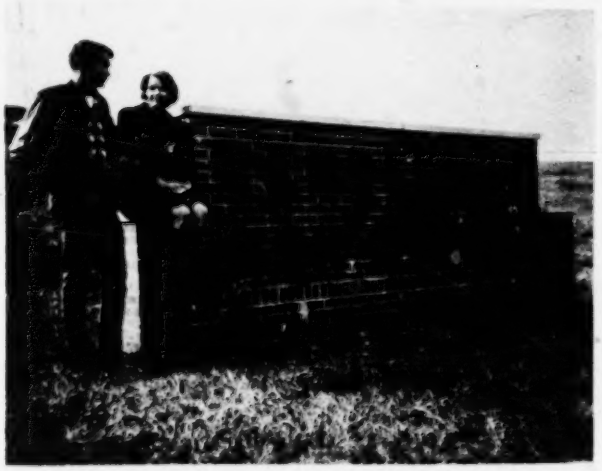
A second addition to the building was begun and completed in 1969. Two large lecture rooms and two small conference rooms were added, and the size of the library was doubled. This latest addition was designed to accomodate flexible modular scheduling.

Ten classes have graduated from Pendleton High School and 1,021 young men and women have received diplomas from the school.

PRESENT STAFF AND CURRICULUM

The present faculty includes 33 teachers, a librarian, a guidance counselor, an assistant principal and a principal. This group of 37 total staff members has received degrees from 20 different colleges and universities. A secretary and two teacher aides assist the staff.

Sixty-four courses are offered at Pendleton. In addition, 18 junior and senior boys attend the Harrison Vocational School and are enrolled in three vocational courses on a part-time basis. The departments and the number of course offerings are listed as follows: Language Arts - 7, Social Studies - 6, Science - 6, Mathematics - 8, Foreign Language - 4, Fine Arts - 6, Health and Physical Education - 3, Agriculture - 4, Home Economics - 4, Business Education - 10, Industrial Arts - 6.



THE TITLE III PROJECT

After being selected to serve as a laboratory school for Region IV-A, the Pendleton High School staff began the project. The staff began holding weekly faculty meetings in the fall of 1968. The purpose of these meetings was to investigate ways and means of improving the total educa-

tional program at Pendleton. The staff initially made a study or analysis of the needs of the students. The faculty was divided into nine investigative committees with each committee studying a particular area. Each committee reported its findings to the total faculty.

After this analysis phase of the project, the faculty began exploring and investigating ways to improve the program at Pendleton. Consultants were brought in throughout the year from Illinois, Indiana, Missouri, Iowa and Kentucky to present innovative ideas to the faculty for their evaluation. The faculty visited 13 high schools and observed various innovations in operation at these schools. The faculty also did research and explored the current literature dealing with new and modern practices in education.

The visits to other schools, the consultants, and the studies and discussions all contributed to helping the faculty arrive at a decision to implement a flexible modular schedule at Pendleton High School. It should be noted, however, that one consultant was particularly inspirational and was instrumental in causing the faculty to gain a confidence which brought about change.

Dr. Lloyd Michael, Professor of Education at Northwestern University and formerly principal of Evanston Township High School, Evanston, Illinois, visited Pendleton High School for two days in the fall of 1968. His consultation and his guidance proved to be the basis upon which the faculty moved forward.

After much discussion, dialogue, and soul-searching, the faculty decided to change the schedule pattern from a traditional six period organization to a flexible modular schedule. This decision was made in the late spring of 1969, and subsequently, intensive preparations and planning began.

FINANCIAL ASSISTANCE

The Pendleton County School District has a moderate financial base as compared to other Kentucky school districts. When compared to national averages, however, the base is far below average. The local taxes account for only 17 percent of the total budget. The average per capita expenditure per student for instructional purposes in Pendleton County was approximately 375 dollars for 1968. The average teacher salary for Pendleton High School for 1969-70 is $6,699. These figures indicate that the program at Pendleton does not rely upon strong financial backing.

Title III provided limited financial assistance. Stipends to teachers for their attendance and time put in at the 25 meetings, fees for consultants, and travel expenses to visit other schools were provided by Title III.

GENERATING THE SCHEDULE

The Measurement Research Center, a division of the Westinghouse Learning Corporation, of Iowa City, Iowa was contracted to make the schedule for Pendleton. In June, a consultant from MRC spent two days at Pendleton recording data to put into the computer for the schedule. Of course considerable preparation had been made in gathering the data for the computer.

The most important data was the time pattern requests for each course offering. Each teacher requested a specific time pattern for each course. For instance, the biology teachers requested that each biology student meet in large groups twice per week for two modules per meeting, in laboratory groups once per week for two modules per meeting. and in small groups once per week for three modules per meeting. Naturally, all student course request data had to be coded and recorded for the computer.

After extensive consultations and several changes in time pattern requests, an acceptable master schedule was generated by the computer.

19 MODS AND NO BELLS

The schedule at Pendleton consists of 19 modules or periods of 20 minute lengths. A bell rings at 8:30 to begin the day and at 3:10 to end the day. No other bells ring. A short homeroom period is held at the beginning and at the end of the day. The module breaks occur at 8:40, 9:00, 9:20, 9:40, etc. It takes approximately three minutes for students to change classes, but it must be remembered that not all students change at every mod break. During some of the breaks, there is very little changing. Lunch is scheduled during modules nine through thirteer

FIVE MAIN FEATURES

At Pendleton the flexible modular schedule has five main areas which makes it quite distinct from traditional schedules. These five features are: lecture group instruction, seminar group instruction, laboratory instruction, independent study or unscheduled time, and team teaching. A brief explanation of these areas is in order.

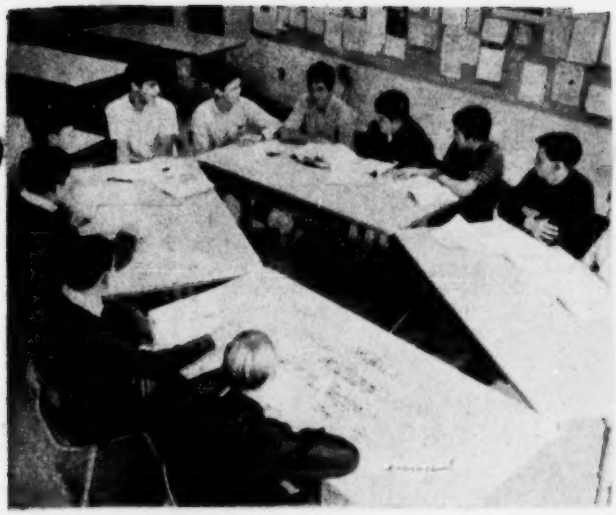
LECTURE GROUP INSTRUCTION

The large lecture groups at Pendleton vary in size. The largest group contains 96 in biology. Social studies large groups are approximately 75 in size, English contains approximately 60 and other lecture groups vary considerably.

Most of the lecture groups meet twice per week for two mods or 40 minutes per meeting. Students must listen, take notes, and prepare questions for the small group discussions that follow.

Teachers lecture, give tests, show films, present material, give demonstrations, and use resource people from the community. Most of the large group sessions however are devoted to lecturing, and precise planning is of utmost importance. The teaching teams work cooperatively with one lecturing and the other member assisting by preparing and distributing materials and assisting in various ways. Some teachers tape their lectures so that students who a absent may listen to the tapes.

As was indicated, intense planning of the lectures is of prime importance. Consequently, teacher performances improve.



SEMINAR GROUP INSTRUCTION

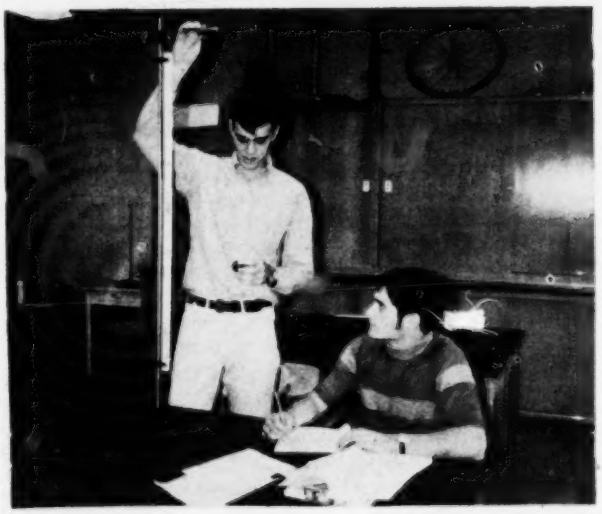
Teachers must possess certain skills to conduct effective small group sessions. The faculty at Pendleton has had some training in small group techniques. Seminar or small group discussions provide unlimited opportunity for teacher-student interaction. The student has unlimited opportunity to express his ideas and to participate. The students like well-organized small group discussions.

The size of the small groups varies at Pendleton. Social studies average 13 per group, English small groups average 14 and other areas are similar in average size. Some of the groups are a bit too small and others a bit too large, but generally, the groups are of sufficient size for effective discussions.

Small groups meet at varying time patterns. Some meet twice per week for two modules per meeting. Others meet for perhaps three modules per meeting, and others may meet more than twice per week.

Ten teaching teams operate in ten subject areas. The subject areas are: U. S. History, government, biology, basic math, agriculture, English I, II, and III, general shop and bookkeeping.

These teams all have periods set aside for team planning. They work together extensively with the lecture group phase of instruction. The seminar groups are divided equally among the members of the team. The teacher who is assigned to a particular seminar group is also responsible for grading the members of that group.



LABORATORY INSTRUCTION

Time patterns for laboratory instruction varies from area to area. These variations are constructed in order to provide for an optimum learning situation in the various areas. Some of the laboratory areas are listed below with the patterns indicated:

	Meetings Per Week	Mods Per Meeting
Biology Lab	1	3
Chemistry Lab	1	4
Art	4	3
Home Ec. Lab	3	3
Typing	4	3
Secretarial Training	5	5
Metalworking	3	4

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UNSCHEDULED TIME AND INDEPENDENT STUDY

Students have approximately 40 percent of their time unscheduled. Teacher's unscheduled time varies considerably, but, it, too, approximates 40 percent. The key to the success of a flexible modular schedule is how well students use their unscheduled time.

Considerable orientation was expended in preparing students for using this unscheduled time. Resource centers and open labs were established. Teachers schedule students back into resource centers for remedial or exploratory work. Students are highly encouraged to use the various resource centers, laboratories, shops and classrooms. Each teacher posts a schedule showing when the particular room or center is open. Students can use these rooms when they are unscheduled.

Some areas are open most of the day. For instance, the typing room is available at all times for students who wish to practice typing or type research papers. Several other areas are open even while classes are being conducted in the room. For instance, a science student can work on a science project in the science lab while a small group discussion is occurring at the same time in the same room.

The library, a large study room, and the cafeteria can accommodate 300 students. The library and the large study room are quiet areas, and the cafeteria is used as a discussion study area where students may work together.

In addition, at a given module, there may be eight to ten other rooms or resource centers available. So a student may have ten, twelve or more places to study when he is unscheduled.

The student decides where he wishes to use his unscheduled time. Roll is never taken, and students are privileged to use any of the available study areas.

There is no changing or movement during a module. Students must wait until the end of a module before going to another area. A few students who abuse the privileges are put on restriction.

STUDY PACKETS

Teachers worked ardously in developing study packets. Th ets or study sheets or guides as they may be called ar y students for their independent study projects. Th ckets explain in detail the objectives to be reached by particular project, the resources available, the requirements to be fulfilled and the desired outcome.

SUMMARY COMMENTS

Listed below are some general statements and quotes which are listed in no particular order, but which may indicate something about the program at Pendleton High School.

1. he student makes more decisions, assumes more responsibility, and is given more trust.
2. Teachers must change from their traditional methods and must re-consider their own personal philosophy of education. They must also re-evaluate their ideas about how people learn.
3. The opportunity for teacher-student interpersonal relationships is greatly increased.
4. A senior girl, "Classes are interesting now. We do something."
5. A history teacher, "I was up until two A.M. preparing for my large group lecture."
6. A parent, "Now that you plained what you are trying to do, I feel much We didn't understand and were alarmed at all ...se students having all of that free time."
7. A math teacher, "Even though I have 37 unscheduled mods per week, they are working me to death."
8. From most students, "We like it."
9. A freshman girl, "Now kids have to decide whether they want to learn anything or not."

The impression should not be made that the flexible modular schedule at Pendleton High School is working perfectly. Indeed there are many areas and elements of the program which need considerable attention and revision. But after being on the new schedule for a short time, most of the signs point toward the program developing into an exciting, interesting and rewarding experience.

Terry Cummins, Principal

APPENDIX E

SELECTED EXCERPT FROM "A COMPARATIVE ANALYSIS OF IN-SERVICE PROGRAMS IN NORTHERN KENTUCKY IN RELATION TO PROMOTIONAL PRACTICES FOR PUPILS," (Unpublished Ed.D. Dissertation, University of Cincinnati, 1971, by William Curtis Foutch.)

CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study analyzed the in-service programs in Northern Kentucky and investigated shifts in the nonpromotion practices of teachers after participating at different levels of intensity in in-service education programs.

The review of the related literature in the area of in-service revealed that the growth of the teacher through in-service was vital to the improvement of instruction, that the traditional instructional programs should be re-evaluated, and that several districts in other states have been experimenting with innovative in-service concepts and methods.

Although the practice of nonpromotion in the elementary and secondary schools of our nation has been decreasing in recent years, the review of the literature revealed that there has been a continuing concern for those children who have experienced nonpromotion.

A summary of the 1969 retention rates of the twenty-two school districts in Northern Kentucky showed that 62.7 percent of the total grade levels had reduction in retention rates when compared to the five year pre-project mean retention rates. Further analysis revealed that 32.3 percent of the total grade levels showed increases in retention rates while 5.0 percent of the total grade levels revealed neither an increase nor a decrease in retention rates.

In a similar comparison, a summary of the 1969 retention rates of the twenty-two school districts revealed that 51.9 percent of the total grade levels had reductions in retention rates when compared to 1968 data, the last year of the pre-project period. This analysis also revealed that 37.3 percent of the total grade levels showed increases in retention rates. In 10.8 percent of the total grade levels there was neither an increase nor a decrease in retention rates, and with the exception of one school district the retention rate was 0.00 percent.

Summary of the Control Group Data

The writer was not able to identify in every way the cause and effect relationship that you would normally expect to do in controlled experimentation. Yet, the writer was able to say that the two groups, Region III and Region IV-A, were similar in certain ways and different in certain ways. As many factors might influence the retention rates within a region, the following similarities and differences between Region III and Region IV-A were summarized for comparative purposts.

Region III borders Region IV-A on the western boundary of Region IV-A. Region III and Region IV-A each contained urban, suburban and rural schools, as well as public and parochial schools. Both regions were established when the Kentucky State Department of Education divided the state into eight regions for ESEA Title III purposes.

The regions were different in several respects. For example, Region IV-A's Title III project was concerned with in-service training programs for teachers. On the other hand, Region III's project dealt with new approaches to aid emotionally disturbed children.

Region III contained more pupils and consequently more teachers than did Region IV-A. The teacher-pupil ratio for Region III was 1:21. In Region IV-A the teacher-pupil ratio was 1:24.

Additional differences can be observed between the two regions when supervisor-teacher ratios are considered. The supervisor-teacher ratio for the urban schools in Region III was 1:144. In Region IV-A the supervisor-teacher ratio for the urban schools was 1:75. For the suburban schools of Region III, the supervisor-teacher ratio was 1:166. In Region IV-A the supervisor-teacher ratio for suburban schools was 1:87. In Region III, the rural schools had a supervisor-teacher ratio of 1:106, while the rural schools of Region IV-A had a supervisor-teacher ratio of 1:119. The two groups, Region III and Region IV-A, should be considered more as comparison groups rather than as strictly an experimental group and a control group.

A comparison of the 1969 retention data with the 1968 retention data of the control group (Region III) with the retention data of this study (Region IV-A) yielded the following comparisons.

For <u>elementary schools</u> the control group showed the amount of change in retention rate between the 1969 data and the 1968 data to be a decrease of 0.41 percent. In a similar comparison, the amount of change in the elementary school data of this study between 1969 and 1968 was a decrease of 0.10 percent.

It might be assumed that the elementary schools in Region III had a greater reduction in retention rate than did Region IV-A, even though the faculties in Region IV-A had participated in a year's in-service training program. However, when the level of participation in Region IV-A's in-service program was considered, a different point of view may be taken. For example, the elementary laboratory schools showed a reduction in

retention rate from 6.62 percent in 1968 to 5.57 percent in 1969. In like manner, the Region IV-A elementary satellite school retention rate for 1968 was 3.99 percent as compared to 2.67 percent in 1969. Yet in the peripheral elementary schools of Region IV-A the rate of retention increased from 4.80 percent in 1968 to 4.93 percent in 1969. A possible explanation would be that the peripheral schools were involved in the in-service program at the least level of participation.

For secondary schools the control group showed a reduction in retention rate of 0.28 percent while the secondary school data of this study showed a reduction of 0.29 percent when 1969 data were compared to 1968 data.

As with the elementary schools, on the surface it would seem that the secondary schools of Region III, the control group, had as much decrease in their retention rate as did the secondary schools of Region IV-A. However, when the level of participation in Region IV-A's teacher in-service training program was considered, greater reductions in retention rates were apparent. For example, the secondary laboratory school retention rate was reduced from 0.91 percent in 1968 to 0.00 percent in 1969. In a similar comparison the secondary satellite schools had a reduction in retention rate from 4.20 percent in 1968 to 3.80 percent in 1969.

For urban schools the control group showed an increase in retention rate of 0.29 percent while the urban school data of this study showed an increase of 0.36 percent when the 1969 data were compared to the 1968 data. The urban school data indicated that both Region III and Region IV-A had increases rather than decreases in retention rates.

Yet when the level of participation in Region IV-A's in-service program was considered, the urban satellite schools showed a reduction in retention rate from 4.48 percent in 1968 to 4.26 percent in 1969.

For suburban schools the control group showed a reduction in retention rate of 0.86 percent compared to a reduction of 0.30 percent in the suburban school data of this study when the 1969 data were compared to the 1968 data.

When considering the suburban school data, it might seem that Region III achieved greater reductions in retention rates than did Region IV-A. But the suburban laboratory school showed a reduction in retention rate from 6.99 percent in 1968 to only 4.67 percent in 1969. In a similar comparison, the suburban satellite schools had a reducation in retention rate from 3.63 percent in 1968 to only 1.54 percent in 1969. The suburban peripheral schools of Region IV-A showed only a slight decrease in retention rate from 4.13 percent in 1968 to 4.02 percent in 1969.

For rural schools the control group showed an increase in retention rate of 0.38 percent while the rural school data of this study showed a reduction in retention rate of 0.34 percent when the 1969 data were compared to the 1968 data.

These differences in retention rates between the two regions were further accentuated when the levels of participation in Region IV-A's in-service program were considered. For instance, the rural laboratory school showed a reduction in retention rate of 0.91 percent. In addition, the rural satellite schools showed a reducation in retention rate of 0.40 percent while the rural peripheral schools showed a reduction of 0.29 percent.

A comparison of the 1969 retention with the pre-project (1964-68) retention data of the control group (Region III) with the retention data of this study (Region IV-A) revealed the following comparisons.

For the elementary school data the control group showed the amount of change in retention rate between the 1969 data and the 1964-68 data to be a decrease of 0.54 percent. For the elementary school data of this study the amount of change in a similar comparison was a decrease of 0.31 percent.

Even when data from the pre-project were considered, it would seem that the elementary schools in Region III had a greater reduction in retention rate than did Region IV-A. Yet when the level of faculty participation in Region IV-A's in-service program was considered, greater reductions in retention rates can be attributed to Region IV-A. In case of the elementary laboratory schools, the mean pre-project rate of retention was 7.63 percent as compared to 5.57 percent in 1969. The reduction in retention rate was not quite as noticeable for the elementary satellite schools but the reduction from 3.50 percent in the pre-project period to 2.67 percent in 1969 was also greater than Region III's reduction for the same period. Only in the elementary peripheral schools was the rate of reduction lower for Region IV-A than for Region III.

For the secondary school data the control group showed a reduction in retention rate of 0.39 percent while the secondary school data of this study showed a reduction of 1.32 percent.

Region IV-A had a much greater reduction in retention rate than did Region III. These differences were further illustrated when the levels of in-service participation were considered for Region IV-A. The secondary laboratory school showed a reduction in retention rate from 1.38 percent in the pre-project period to 0.00 percent in 1969. Similarly, the secondary satellite schools showed even greater reductions in retention rates when the pre-project rate of 6.11 percent was compared to the 1969 retention rate of

3.80 percent. In addition, the secondary peripheral schools showed a greater reduction in retention rate than did Region III.

For the urban school data the control group showed a reduction in retention rate of 9.24 percent while the urban school data of this study revealed an increase in retention rate of 0.08 percent.

The urban school data seemed to imply that Region III achieved greater reduction in retention rate than did Region IV-A. However, when the level of participation in Region IV-A's in-service program was considered a different conclusion can be drawn from the laboratory and satellite school data. The urban laboratory school retention rate was reduced from the pre-project rate of 9.19 percent to 6.69 percent in 1969. In addition, the urban satellite schools showed a reduction from 4.74 percent in the pre-project period to 4.26 percent in 1969.

For the suburban school data the control group showed a reduction in retention rate of 0.76 percent while the suburban school data of this study showed a reduction in retention rate of 0.96 percent.

The differences are more widely evidenced when levels of participation in Region IV-A's in-service program are considered. The suburban laboratory school showed a reduction from the pre-project period rate of 6.40 percent to 4.67 percent in 1969. The suburban satellite schools showed a reduction in retention rate from 2.56 percent during the pre-project period to 1.54 percent in 1969. Even the suburban peripheral schools showed a greater reduction in retention rate than did Region III.

For the rural school data the control group showed a reduction in retention rate of 0.26 percent while the rural school data of this study showed a reduction in retention rate of 0.51 percent.

When the levels of participation in Region IV-A's in-service program were considered, the differences between the rural school data of Region IV-A and Region III are further accentuated. The rural laboratory school, the rural satellite schools and the rural peripheral schools all had greater reductions in retention rates than did Region III when the 1969 data were compared to the pre-project period.

Summary of District In-Service Participation

Three schools were involved in the region's in-service program at the laboratory school level for in-service expenditures of $33,075.00. Twelve schools were involved in the region's in-service program at the satellite school level for an in-service expenditure of $5,400.00. The remaining 148 schools in the region participated in the region's Title III in-service program at the peripheral school level. The twenty-two districts used 534 and 1/2 visitation days for an in-service expense of $11,515.41. The twenty-two districts used fifty-four and one-half consultant days for an in-service expenditure of $5,450.00. There were 649 faculty members from the region's twenty-two school districts who attended in-service workshops for an expenditure of $9,735.00. In addition there were 428 visits to the districts by the Title III staff members. The total financial expenditure for the region's Title III in-service program amounted to $158,946.13 for the 1968-69 school year.

Testing the Hypotheses

The hypotheses of this study tested whether or not changes in teacher behavior as reflected in retention rates of pupils occurred in proportion to teacher involvement in school improvement activities as reflected in the laboratory, satellite, and peripheral schools.

Summary of Findings

Two hypotheses with five sub-hypotheses each, were tested in this study.

Hypothesis 1. There is no relationship between the levels of in-service involvement and the change in retention rate of 1969 over 1968 as practiced by teachers in the three kinds of schools in the region.

The first hypothesis was accepted when chi square tests showed that the difference between the 1969 retention rate and the 1968 retention rate for all the region's schools was not significant. However, the tests showed that the satellite school faculties did have significant differences in their promotional practices when the 1969 retention data were compared with the 1968 retention data.

Hypothesis 1 (a). There will be no significant difference in the change in retention rates of 1969 over 1968 as practiced by faculties of the elementary schools. Hypothesis 1 (a) was accepted when chi square tests showed that the difference between the 1969 retention rate and the 1968 retention rate for the region's elementary schools was not significant. The chi square tests did show that the elementary satellite school faculties did have significant differences in their promotional practices.

Hypothesis 1 (b). There will be no significant difference in the change in retention rates of 1969 over 1968 as practiced by faculties of the secondary schools. Hypothesis 1 (b) was accepted when chi square tests showed that the difference between the 1969 retention rate and the 1968 retention rate for the region's secondary schools was not significant.

Hypothesis 1 (c). There will be no significant difference in the change in retention rates of 1969 over 1968 as practiced by faculties of the urban schools. Hypothesis 1 (c) was accepted when chi square tests

showed that the difference between the 1969 retention rate and the 1968 retention rate for the region's urban schools was not significant. All three parts of Hypothesis 1 (c) were accepted.

Hypothesis 1 (d). There will be no significant difference in the change in retention rates of 1969 over 1968 as practiced by faculties of the suburban schools. Hypothesis 1 (d) was rejected when chi square tests showed that the difference between the 1969 retention rate and the 1968 retention rate for the region's suburban schools was significant. The statistical tests showed that when the suburban laboratory, and suburban peripheral school faculties considered separately, they did not have significant differences in their promotional practices.

Hypothesis 1 (e). There will be no significant difference in the change in retention rates of 1969 over 1968 as practiced by faculties of the rural schools. Hypothesis 1 (e) was accepted when chi square tests showed that the difference between the 1969 retention rate and the 1968 retention rate for the region's rural schools was not significant.

Hypothesis 2. There is no relationship between the levels of in-service involvement and the change in retention rate of 1969 over the pre-project period (1964-68) as practiced by teachers for various kinds of schools in the region. The second hypothesis was rejected when chi square tests showed the difference between the 1969 retention rate and the mean retention rate for the pre-project period (1964-1968) for all the region's schools to be significant.

Hypothesis 2 (a). There will be no significant difference in the change in retention rates of 1969 over the pre-project period (1964-68) as practiced by faculties of the elementary schools. Hypothesis 2 (a) was

rejected when chi square tests showed the difference between the 1969 retention rate and the mean retention rate for the pre-project period (1964-68) for the region's elementary schools to be significant. However the statistical tests showed that when the elementary peripheral faculties were considered separately they did not have significant differences in their promotional practices.

Hypothesis 2 (b). There will be no significant difference in the change in retention rates of 1969 over the pre-project period (1964-68) as practiced by faculties of the secondary schools. Hypothesis 2 (b) was rejected when chi square tests showed the difference between the 1969 retention rate and the mean tetention rate for the pre-project period (1964-68) for the region's secondary schools to be significant.

Hypothesis 2 (c). There will be no significant difference in the change in retention rates of 1969 over the pre-project period (1964-68) as practiced by faculties of the urban schools. Hypothesis 2 (c) was accepted when chi square tests showed that the difference between the 1969 retention rate and the mean retention rate for the pre-project period (1964-68) for the region's urban schools was not significant.

Hypothesis 2 (d). There will be no significant difference in the change in retention rates of 1969 over the pre-project period (1964-68) as practiced by faculties of the suburban schools. Hypothesis 2 (d) was rejected when chi square tests showed the difference between the 1969 retention rate and the mean retention rate for the pre-project period (1964-68) for the region's suburban schools to be significant. However the statistical tests showed that when the suburban laboratory faculty was considered separately they did not have significant differences in their promotional practices.

Hypothesis 2 (e). There will be no significant difference in the change in retention rates of 1969 over the pre-project period (1964-68) as practiced by faculties of the rural schools. Hypothesis 2 (e) was rejected when chi square tests showed the difference between the 1969 retention rate and the mean retention rate for the pre-project period (1964-68) for the region's rural schools to be significant. The statistical tests showed that when the laboratory, satellite and peripheral school da6a were considered separately, only the peripheral school faculties did not have significant differences in their promotional practices.

Conclusions

The following conclusions concerning in-service education programs and nonpromotion practices in the Northern Kentucky Schools were based on the findings in this study.

1. The comparison of the 1969 retention rate with the 1968 retention rate showed that there were no statistically meaningful changes in retention rates for the following school districts in the region:

a. Walton Verona
b. Augusta
c. Bellevue
d. Dayton
e. Fort Thomas
f. Newport
g. Silver Grove
h. Southgate
i. Gallatin County
j. Grant County
k. Williamstown
l. Covington
m. Erlanger
n. Owen County
o. Trimble County

2. The comparison of the 1969 retention rate with the 1968 retention rate showed that there were statistically meaningful changes in retention rates for the following school districts in the region:

a. Boone County
b. Campbell County
c. Carroll County
d. Kenton County
e. Ludlow
f. Pendleton County
g. Covington Diocese

It should be noted that the differences in retention rates for the Boone County, Ludlow and Pendleton County districts were increases rather than decreases in retention rates.

3. The comparison of the 1969 retention rate with the mean retention rate for the pre-project period (1964-68) showed that there were no statistically meaningful changes in retention rates for the following school districts in the region:

a. Walton Verong
b. Augusta
c. Dayton
d. Fort Thomas
e. Silver Grove
f. Southgate
g. Carroll County
h. Gallatin County
i. Grant County
j. Williamstown
k. Covington
l. Erlanger
m. Ludlow
n. Owen County
o. Trimble County
p. Newport

4. The comparison of the 1969 retention rate with the mean retention rate for the pre-project period (1964-68) showed that there were statistically meaningful changes in retention rates for the following school districts in the region:

a. Boone County

b. Campbell County

c. Bellevue

d. Kenton County

e. Pendleton County

f. Covington Diocese

Again it should be noted that the differences in retention rates for the Boone County, Ludlow, and Pendleton County districts were increases rather than decreases in retention rates.

5. The level of in-service involvement did not greatly affect the change in retention rate of 1969 over 1968, except at the satellite school level.

However, when the data were broken down into elementary, secondary, urban, suburban, and rural categories for further analysis, some changes in retention rates were found to be significant. The level of in-service involvement did affect the change in retention rate of 1969 over 1968 in the elementary satellite schools, and suburban satellite schools.

6. The level of in-service involvement did affect the change in retention rate of 1969 over the mean retention rate for the pre-project period (1964-68).

However, when the data were broken down into elementary, secondary, urban, suburban, and rural categories for further analysis, some changes in retention rates were found to be nonsignificant. The level of in-service involvement did not affect the change in retention rate of 1969 over (1964-68) in the elementary peripheral schools, the urban laboratory school, the urban satellite schools, the urban peripheral schools, the suburban laboratory school, and the rural peripheral schools.

Recommendations

The following recommendations are based upon the data collected in this study.

1. It is recommended that the in-service education approach utilizing the laboratory school with satellite and peripheral schools be made available to regions or school districts wishing to implement a program of in-service education.

2. It is recommended that visitation days be made available to school districts so that faculty members may visit promising school programs.

3. It is recommended that provisions be made available to school districts to enable faculty members to plan and participate in in-service workshops and seminars on regional, district and local school levels.

4. It is recommended that in-service activities similar to those provided by the Northern Kentucky Title III Project to be made available to schools or school districts which are interested in producing changes in teacher behavior as reflected in rates of pupil retention.

Implications and Suggestions for Further Study

Those who are concerned with the importance of sound in-service training programs will probably also be concerned with the need for further study in this area.

The results of this study indicate that there is a definite relationship between nonpromotion and the three levels of participation in in-service programs which were designated in this study as the laboratory, satellite and peripheral school levels of in-service training.

In addition to involving a longer period of time in the study, provisions could be made to allow for analyzing any longitudinal effects which might result from the in-service training program.

Another suggestion for further study in this area might be an examination of what educators could learn about in-service training from other professions through a study of the in-service training programs found in other professions.

In addition to the gauge of pupil retention rates, other ways of judging the effectiveness of in-service training programs might be developed and investigated in the region.

A further study of in-service education will hopefully produce a better understanding of the need for better cooperative efforts in analyzing the needs of pupils, and in designing and implementing programs to meet these needs.